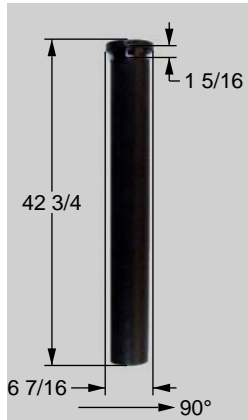
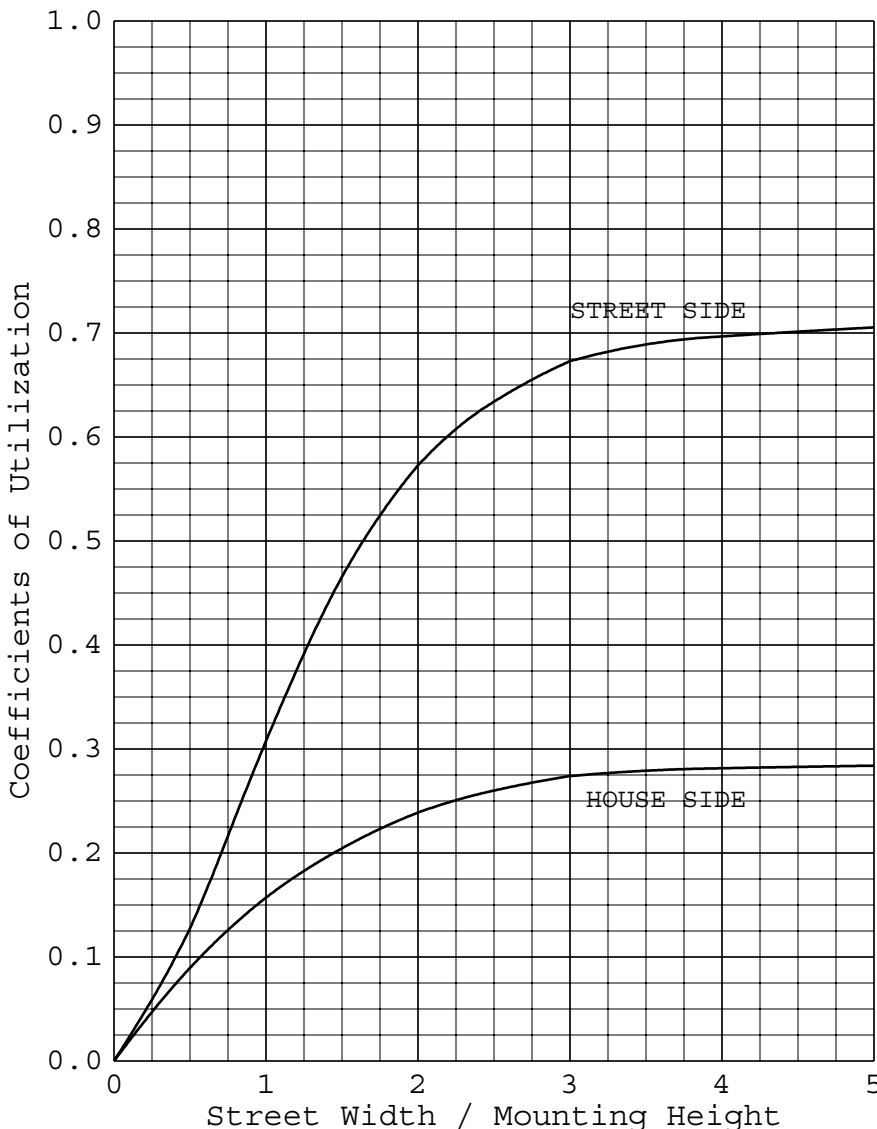


COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



REPORT NUMBER: ITL78084
 ISSUE DATE: 07/30/13 PAGE: 1 OF 10
 PREPARED FOR: RAB LIGHTING, INC.
 CATALOG NUMBER: BLEDR12 (42" ROUND BOLLARD W/LED @ 90-DEGREES)
 LUMINAIRE: EXTRUDED BROWN PAINTED CYLINDRICAL METAL LOWER HOUSING, CAST METAL TOP, CAST FINNED METAL HEAT SINK WITH BLACK PAINTED INTERIOR, MOLDED SPECULAR FINISHED PLASTIC REFLECTOR, 2 WHITE CIRCUIT BOARDS EACH WITH 1 LED, CLEAR PLASTIC LENS, CAST BROWN PAINTED METAL BOTTOM. RAB TEST INFORMATION: 42" ROUND BOLLARD W/LED @ 90-DEGREES.
 LAMPS: TWO WHITE MULTI-CHIP LIGHT EMITTING DIODES (LEDS) EACH CONTAINING LEDES ARRANGED IN AN ARRAY OF 3 LINEAR ROWS. TILTED 19-DEGREES FROM VERTICAL BASE-UP POSITION.
 TOTAL INPUT WATTS = 16.0 AT 120.0 VOLTS
 LED DRIVER: RAB RD12-24-A0720
 NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE LED DRIVER.
 TEST PROCEDURE: IESNA LM-79-08
 TEST DISTANCE = 35.0 FEET



	PERCENT LUMENS	OF FIXTURE
DOWNWARD STREET SIDE	588	71.1
DOWNWARD HOUSE SIDE	236	28.5
DOWNWARD TOTAL	824	99.6
UPWARD STREET SIDE	3	0.3
UPWARD HOUSE SIDE	1	0.1
UPWARD TOTAL	3	0.4
TOTAL FLUX	828	100.0
EFFICACY = 51.8 lm/W		

Checked*N.WHITE*.....
 Approved*R.BEATTIE*.....
 Lighting Engineer

ALL CANDELA AND LUMENS IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS LUMINAIRE SAMPLE.



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NVLAP LAB CODE: 200925-0

INDEPENDENT TESTING LABORATORIES, INC.
 4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

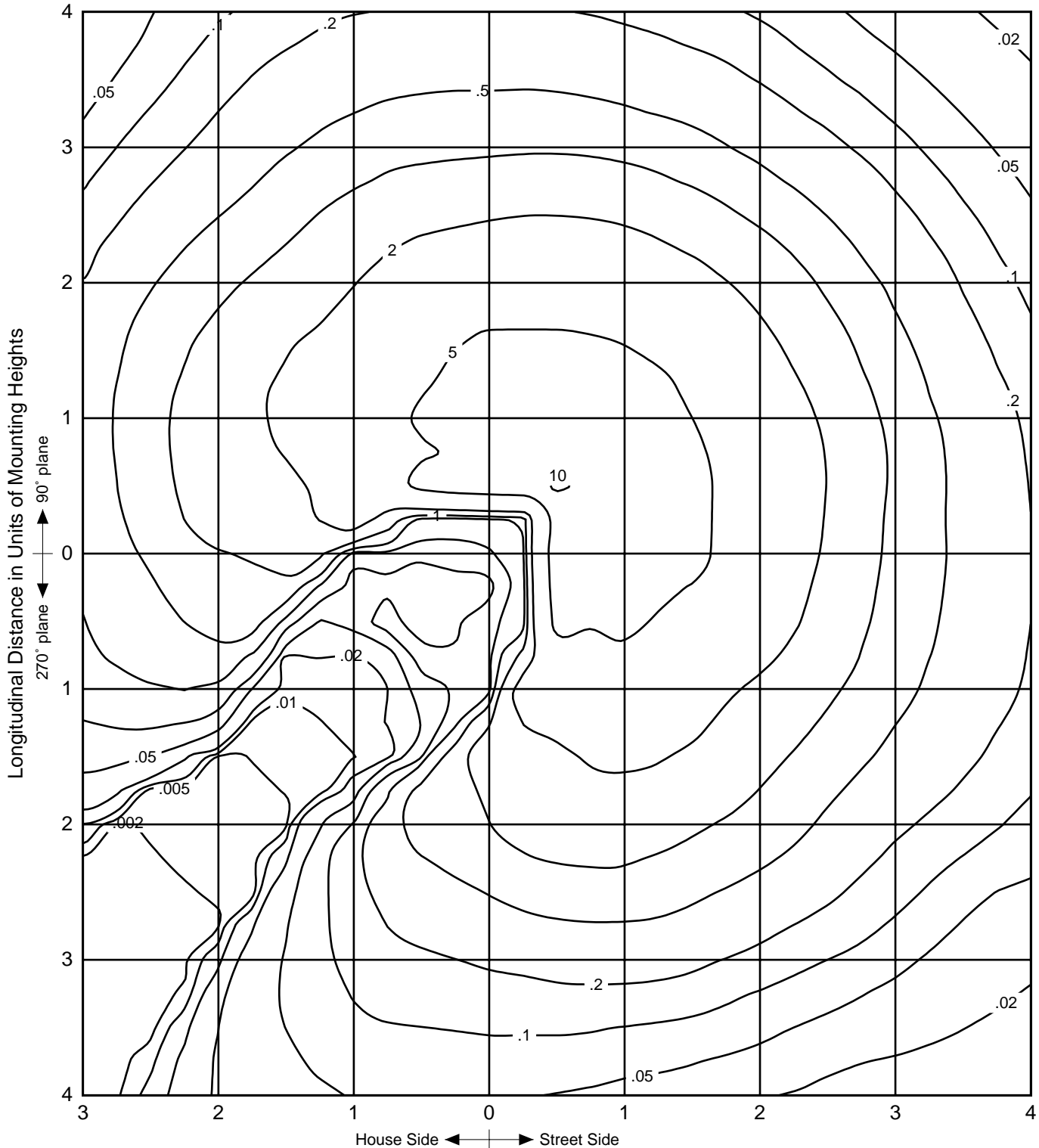
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION
 Values based on 3.5 foot mounting height.

REPORT NUMBER: ITL78084

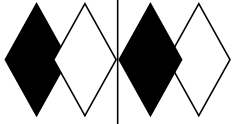
PAGE: 2 OF 10

ISSUE DATE: 07/30/13

PREPARED FOR: RAB LIGHTING, INC.

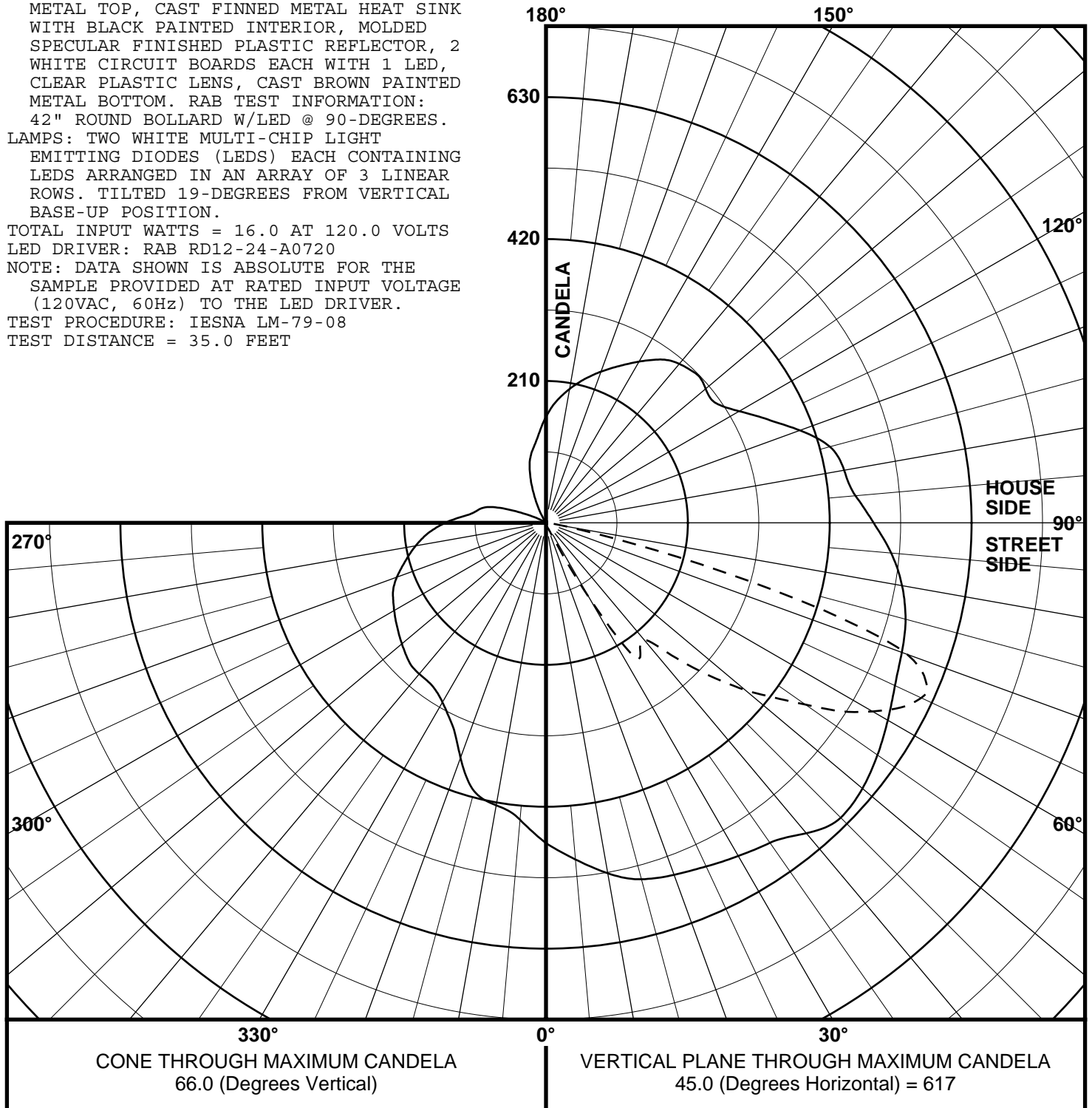


THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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 TEST PROCEDURE: IESNA LM-79-08
 TEST DISTANCE = 35.0 FEET

MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





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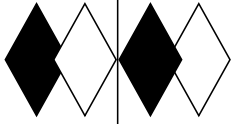
FLUX DISTRIBUTION BY SOLID ANGLE

(PER IESNA TM-15-11, LUMINAIRE CLASSIFICATION SYSTEM FOR OUTDOOR LUMINAIRES)

	LUMENS	PERCENT OF FIXTURE	BUG ZONE RATINGS
FORWARD LIGHT	588.	71.1	
FL (0- 30)	12.1	1.5	
FM (30- 60)	270.7	32.7	
FH (60- 80)	300.0	36.2	G0
FVH(80- 90)	5.4	0.7	G0
BACK LIGHT	236.	28.5	
BL (0- 30)	4.6	0.6	B0
BM (30- 60)	95.7	11.6	B0
BH (60- 80)	133.3	16.1	B1 G1
BVH(80- 90)	2.6	0.3	G0
UPLIGHT	3.	0.4	
UL (90-100)	1.3	0.2	U1
UH (100-180)	2.0	0.2	U1
TRAPPED LIGHT	0.	0.0	
TOTAL FLUX	828.	100.0	

BACKLIGHT, UPLIGHT, AND GLARE (BUG) RATINGS
(PER ADDENDUM A FOR IESNA TM-15-11)

BUG RATING: B1 U1 G1



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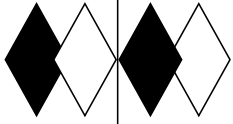
PAGE: 5 OF 10

CANDELA TABULATION

	STREET SIDE						LATERAL ANGLE				
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0	90.0
	180.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	175.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	165.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	155.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	145.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	135.0	1.	1.	1.	1.	1.	1.	1.	0.	0.	0.
	125.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	115.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	105.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	95.0	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.
	92.5	2.	3.	2.	2.	2.	2.	2.	2.	2.	2.
	90.0	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.
	87.5	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
	85.0	10.	9.	9.	8.	7.	6.	5.	5.	5.	5.
V	82.5	23.	22.	21.	18.	14.	11.	10.	10.	12.	14.
E	80.0	50.	48.	47.	37.	32.	29.	28.	33.	39.	45.
R	77.5	126.	110.	112.	90.	86.	85.	85.	103.	113.	123.
T	75.0	215.	213.	220.	214.	232.	237.	221.	226.	218.	233.
I	72.5	296.	299.	356.	382.	416.	432.	409.	386.	352.	325.
C	70.0	378.	400.	484.	521.	533.	569.	548.	526.	479.	419.
A	67.5	455.	482.	551.	568.	578.	608.	599.	576.	551.	501.
L	66.0<<	474.	500.	546.	561.	578.	617.	599.	570.	551.	513.
	65.0	473.	494.	534.	554.	580.	613.	597.	563.	541.	508.
A	62.5	448.	463.	508.	539.	557.	592.	578.	542.	511.	475.
N	60.0	426.	437.	478.	507.	528.	558.	547.	513.	480.	447.
G	57.5	423.	419.	448.	467.	492.	519.	506.	476.	447.	425.
L	55.0	419.	412.	421.	431.	455.	469.	465.	441.	412.	415.
E	52.5	358.	403.	396.	396.	412.	424.	421.	401.	380.	400.
	50.0	290.	353.	379.	359.	374.	385.	379.	355.	362.	335.
	47.5	259.	279.	363.	325.	335.	341.	330.	320.	350.	257.
	45.0	235.	236.	324.	307.	297.	297.	287.	303.	302.	219.
	42.5	210.	209.	243.	291.	265.	252.	254.	285.	226.	192.
	40.0	175.	174.	176.	251.	246.	226.	239.	238.	162.	160.
	37.5	144.	143.	141.	183.	240.	229.	233.	176.	134.	136.
	35.0	124.	123.	125.	133.	219.	243.	207.	136.	118.	120.
	30.0	129.	130.	131.	122.	123.	130.	139.	131.	124.	123.
	25.0	85.	80.	74.	50.	33.	19.	28.	57.	76.	90.
	20.0	10.	10.	11.	9.	9.	9.	8.	9.	10.	12.
	15.0	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.
	10.0	4.	4.	5.	5.	5.	5.	5.	5.	5.	4.
	5.0	3.	3.	3.	4.	4.	4.	3.	4.	3.	3.
	0.0	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.

||
 PLANE OF MAXIMUM CANDELA

CONE OF MAXIMUM CANDELA



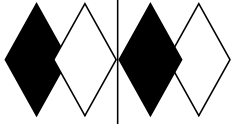
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CANDELA TABULATION

	HOUSE SIDE		LATERAL ANGLE							
	95.0	105.0	115.0	125.0	135.0	145.0	155.0	165.0	175.0	180.0
180.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
175.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
165.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
155.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
145.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
135.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
125.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
115.0	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
105.0	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.
95.0	2.	1.	1.	1.	1.	1.	1.	0.	0.	0.
92.5	2.	2.	2.	1.	1.	1.	1.	1.	1.	0.
90.0	3.	2.	2.	2.	1.	1.	1.	1.	1.	1.
87.5	4.	3.	3.	2.	2.	2.	1.	1.	1.	1.
85.0	6.	6.	5.	4.	3.	2.	2.	1.	1.	1.
V 82.5	16.	15.	15.	9.	6.	4.	2.	2.	1.	1.
E 80.0	48.	61.	49.	21.	13.	10.	6.	6.	9.	9.
R 77.5	141.	137.	109.	62.	40.	32.	26.	26.	32.	42.
T 75.0	231.	234.	198.	146.	127.	115.	82.	56.	62.	61.
I 72.5	318.	320.	279.	234.	230.	222.	176.	122.	89.	81.
C 70.0	382.	383.	343.	295.	295.	282.	255.	193.	137.	111.
A 67.5	442.	425.	368.	308.	309.	302.	268.	226.	181.	149.
L 66.0<<	460.	435.	362.	308.	313.	295.	256.	220.	181.	157.
65.0	462.	438.	351.	313.	309.	289.	244.	207.	171.	152.
A 62.5	449.	449.	338.	306.	291.	263.	216.	170.	135.	124.
N 60.0	444.	391.	325.	289.	269.	238.	189.	143.	108.	101.
G 57.5	434.	331.	308.	271.	248.	214.	164.	126.	98.	97.
L 55.0	369.	306.	287.	254.	227.	188.	144.	112.	102.	106.
E 52.5	297.	283.	264.	233.	204.	168.	129.	105.	112.	82.
50.0	265.	259.	240.	211.	182.	152.	114.	107.	88.	27.
47.5	240.	236.	217.	188.	163.	132.	107.	114.	36.	6.
45.0	218.	212.	195.	167.	140.	115.	111.	105.	10.	4.
42.5	193.	186.	168.	143.	121.	111.	119.	61.	4.	3.
40.0	160.	153.	136.	124.	115.	119.	107.	21.	4.	3.
37.5	135.	130.	117.	115.	118.	125.	67.	7.	3.	3.
35.0	120.	118.	112.	118.	127.	103.	25.	5.	3.	3.
30.0	123.	129.	124.	117.	71.	18.	5.	4.	3.	2.
25.0	89.	78.	53.	27.	8.	5.	4.	3.	2.	2.
20.0	12.	9.	7.	6.	4.	4.	3.	3.	2.	2.
15.0	6.	5.	5.	4.	4.	3.	3.	3.	2.	2.
10.0	4.	4.	4.	3.	3.	2.	2.	2.	2.	2.
5.0	3.	3.	3.	3.	2.	2.	2.	2.	1.	1.
0.0	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.

CONE OF MAXIMUM CANDELA



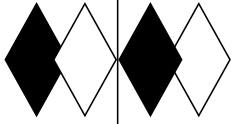
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CANDELA TABULATION

	HOUSE SIDE		LATERAL ANGLE							
	185.0	195.0	205.0	215.0	225.0	235.0	245.0	255.0	265.0	270.0
	180.0	0.	0.	0.	0.	0.	0.	0.	0.	0.
	175.0	0.	0.	0.	0.	0.	0.	0.	0.	0.
	165.0	0.	0.	0.	0.	0.	0.	0.	0.	0.
	155.0	0.	0.	0.	0.	0.	0.	0.	0.	0.
	145.0	0.	0.	0.	0.	0.	0.	0.	0.	0.
	135.0	0.	0.	0.	0.	0.	0.	0.	0.	0.
	125.0	0.	0.	0.	0.	0.	0.	0.	0.	0.
	115.0	0.	0.	0.	0.	0.	0.	0.	0.	0.
	105.0	0.	0.	0.	0.	0.	0.	0.	1.	1.
	95.0	0.	0.	0.	0.	0.	0.	1.	1.	1.
	92.5	0.	0.	0.	0.	0.	0.	1.	1.	1.
	90.0	1.	0.	0.	0.	0.	1.	1.	1.	1.
	87.5	1.	1.	0.	0.	0.	1.	1.	1.	1.
	85.0	1.	1.	1.	0.	0.	1.	1.	2.	2.
V	82.5	2.	2.	12.	0.	0.	1.	6.	2.	2.
E	80.0	12.	30.	23.	1.	0.	1.	20.	30.	9.
R	77.5	43.	44.	35.	1.	1.	1.	30.	41.	37.
T	75.0	61.	63.	40.	1.	1.	1.	34.	59.	54.
I	72.5	80.	70.	40.	1.	1.	1.	32.	66.	73.
C	70.0	94.	77.	42.	1.	1.	1.	31.	70.	85.
A	67.5	118.	83.	43.	1.	1.	1.	32.	82.	108.
L	66.0<<	130.	93.	35.	1.	1.	1.	23.	90.	120.
	65.0	130.	100.	22.	1.	1.	1.	12.	98.	123.
A	62.5	114.	110.	4.	1.	1.	1.	2.	110.	113.
N	60.0	106.	54.	2.	1.	1.	1.	1.	40.	105.
G	57.5	110.	11.	2.	1.	1.	1.	2.	8.	105.
L	55.0	69.	5.	2.	1.	1.	1.	2.	5.	59.
E	52.5	16.	4.	2.	1.	1.	1.	2.	5.	12.
	50.0	4.	3.	2.	1.	1.	1.	3.	5.	5.
	47.5	3.	3.	3.	2.	1.	1.	3.	4.	4.
	45.0	3.	3.	4.	3.	1.	2.	5.	4.	4.
	42.5	2.	2.	4.	4.	3.	4.	4.	3.	3.
	40.0	3.	2.	3.	4.	6.	4.	3.	3.	3.
	37.5	2.	2.	2.	2.	3.	3.	2.	3.	3.
	35.0	2.	2.	2.	1.	1.	2.	2.	2.	3.
	30.0	2.	2.	1.	1.	1.	1.	2.	2.	2.
	25.0	2.	2.	1.	1.	1.	1.	1.	2.	2.
	20.0	2.	1.	1.	1.	1.	1.	1.	1.	2.
	15.0	2.	1.	1.	1.	0.	0.	1.	1.	1.
	10.0	1.	1.	1.	0.	0.	0.	1.	1.	1.
	5.0	1.	1.	0.	0.	0.	0.	0.	1.	1.
	0.0	2.	2.	2.	2.	2.	2.	2.	2.	2.

CONE OF MAXIMUM CANDELA



itl boulder
 THE LIGHT CENTER OF THE INDUSTRY SINCE 1955



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 4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

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CANDELA TABULATION

	STREET SIDE					LATERAL ANGLE				
	275.0	285.0	295.0	305.0	315.0	325.0	335.0	345.0	355.0	360.0
180.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
175.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
165.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
155.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
145.0	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.
135.0	0.	0.	1.	0.	1.	1.	1.	1.	1.	1.
125.0	0.	1.	1.	1.	1.	1.	1.	1.	1.	1.
115.0	0.	1.	1.	1.	1.	1.	1.	1.	1.	1.
105.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
95.0	1.	1.	1.	1.	1.	1.	2.	2.	2.	2.
92.5	1.	1.	1.	2.	2.	2.	2.	3.	2.	2.
90.0	1.	1.	2.	2.	2.	3.	3.	3.	3.	3.
87.5	2.	2.	2.	3.	3.	3.	4.	4.	4.	4.
85.0	2.	2.	3.	3.	4.	4.	8.	10.	10.	10.
V 82.5	3.	3.	3.	4.	7.	12.	21.	23.	23.	23.
E 80.0	7.	5.	5.	9.	19.	26.	55.	69.	49.	50.
R 77.5	27.	22.	23.	28.	42.	53.	98.	126.	129.	126.
T 75.0	55.	55.	68.	82.	110.	125.	176.	212.	212.	215.
I 72.5	80.	110.	149.	175.	205.	210.	246.	285.	291.	296.
C 70.0	121.	174.	227.	241.	270.	275.	305.	350.	362.	378.
A 67.5	165.	215.	255.	266.	285.	293.	333.	394.	423.	455.
L 66.0<<	175.	215.	250.	269.	288.	294.	329.	411.	441.	474.
65.0	171.	208.	242.	266.	288.	294.	316.	422.	445.	473.
A 62.5	139.	176.	219.	254.	284.	296.	302.	419.	429.	448.
N 60.0	112.	147.	194.	236.	274.	293.	302.	336.	432.	426.
G 57.5	103.	127.	171.	216.	257.	282.	296.	309.	427.	423.
L 55.0	105.	114.	151.	194.	239.	266.	284.	297.	360.	419.
E 52.5	111.	107.	137.	174.	217.	246.	266.	283.	303.	358.
50.0	77.	107.	121.	156.	196.	225.	245.	264.	279.	290.
47.5	24.	116.	111.	137.	176.	206.	225.	242.	255.	259.
45.0	7.	99.	112.	119.	151.	184.	207.	220.	231.	235.
42.5	5.	46.	120.	111.	128.	156.	181.	194.	206.	210.
40.0	4.	14.	100.	119.	117.	132.	147.	161.	173.	175.
37.5	4.	7.	51.	127.	120.	117.	123.	133.	142.	144.
35.0	4.	5.	15.	93.	131.	120.	114.	117.	123.	124.
30.0	3.	4.	5.	12.	61.	110.	128.	128.	129.	129.
25.0	2.	3.	4.	5.	8.	17.	44.	65.	80.	85.
20.0	2.	2.	3.	4.	4.	5.	6.	7.	10.	10.
15.0	2.	2.	2.	3.	3.	4.	4.	4.	5.	6.
10.0	1.	2.	2.	2.	2.	3.	3.	3.	4.	4.
5.0	1.	1.	2.	2.	2.	2.	2.	3.	3.	3.
0.0	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.

CONE OF MAXIMUM CANDELA



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REPORT NUMBER: ITL78084
ISSUE DATE: 07/30/13
PREPARED FOR: RAB LIGHTING, INC.

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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	0
5- 10	0
10- 15	0
15- 20	1
20- 25	3
25- 30	12
30- 35	21
35- 40	31
40- 45	46
45- 50	66
50- 55	89
55- 60	113
60- 65	139
65- 70	150
70- 75	106
75- 80	38
80- 85	7
85- 90	1
90- 95	1
95-100	1
100-105	0
105-110	0
110-115	0
115-120	0
120-125	0
125-130	0
130-135	0
135-140	0
140-145	0
145-150	0
150-155	0
155-160	0
160-165	0
165-170	0
170-175	0
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	0
0- 20	1
0- 30	17
0- 40	69
0- 50	181
0- 60	383
0- 70	672
0- 80	816
0- 90	824
0-100	826
0-110	826
0-120	827
0-130	827
0-140	828
0-150	828
0-160	828
0-170	828
0-180	828



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ADDRESS: 170 LUDLOW AVE
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REPORT NUMBER: ITL78090
DATE: 08/16/13
Page 1 of 4

PREPARED FOR: RAB LIGHTING, INC.
CATALOG NUMBER: BLEDR12 (42" ROUND BOLLARD W/LED @ 90-DEGREES)

ADDRESS: 170 LUDLOW AVE
NORTHVALE, NJ 07647

LUMINAIRE: EXTRUDED BROWN PAINTED CYLINDRICAL METAL LOWER HOUSING, CAST METAL TOP, CAST FINNED METAL HEAT SINK WITH BLACK PAINTED INTERIOR, MOLDED SPECULAR FINISHED PLASTIC REFLECTOR, 2 WHITE CIRCUIT BOARDS EACH WITH 1 LED, CLEAR PLASTIC LENS, CAST BROWN PAINTED METAL BOTTOM. RAB TEST INFORMATION: 42" ROUND BOLLARD W/LED @ 90-DEGREES.

LAMP: TWO WHITE MULTI-CHIP LIGHT EMITTING DIODES (LEDS) EACH CONTAINING LEDES ARRANGED IN AN ARRAY OF 3 LINEAR ROWS. TILTED 19-DEGREES FROM VERTICAL BASE-UP POSITION.

DRIVER: RAB RD12-24-A0720

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120.0 AND 277.0 VAC, 60Hz) TO THE LED DRIVER.

INSTRUMENTS: Associated Power Technologies APT5040 AC Power Source Calibration Due: N/A
Yokogawa WT210 Digital Power Meter #6 09/24/13
Ocean Optics QE65000 Spectroradiometer 03/16/14
ITL 2.0m Diameter Integrating Sphere S20-2, 4PI Geometry 03/16/14

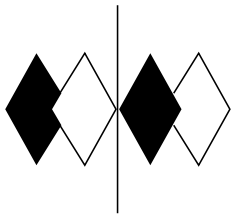
OBJECT OF TEST: Measure the Total Radiant Flux*, Spectral Power Distribution (SPD), Correlated Color Temperature (CCT), Color Rendering Indices (CRIa,1-14), Chromaticity Coordinates (x,y; u'v'), ANSI C78.377 Duv, and electrical data including ANSI C82.77-2002 Power Factor (PF) and Total Harmonic Distortion (THD) to the test sample. Report Off-State Power. Measure electrical data including Total Harmonic Distortion (THD) at maximum rated voltage.

PROCEDURE: The test sample was provided by the customer and had an unknown number of operating hours. The test sample was mounted inside the integrating sphere and allowed to stabilize. After stabilization occurred, measurements were taken. In order to measure mean performance, multiple data sets were recorded and averaged. Readings were taken with the test sample operating at 120.0 VAC input. Electrical data was also recorded at maximum nominal rated input voltage (277.0 VAC). All testing performed in a 25 +/-1 degree Celsius free air ambient and in accordance with IESNA LM-79-08. All data are traceable to the National Institute of Standards and Technology. Off-State Power was reported with no voltage applied to the sample.

*NOTE: Proper calibration of integrating spheres for measuring total flux output of non-directional samples will produce reliable, repeatable results within the calibration tolerances of the equipment used. However, measurement of test samples with significant self absorption and/or directional output, even when these effects are compensated for, are likely to have a greater variation in results compared to the flux output calculated from a goniophotometric exploration since these artifacts do not affect the goniophotometric results.

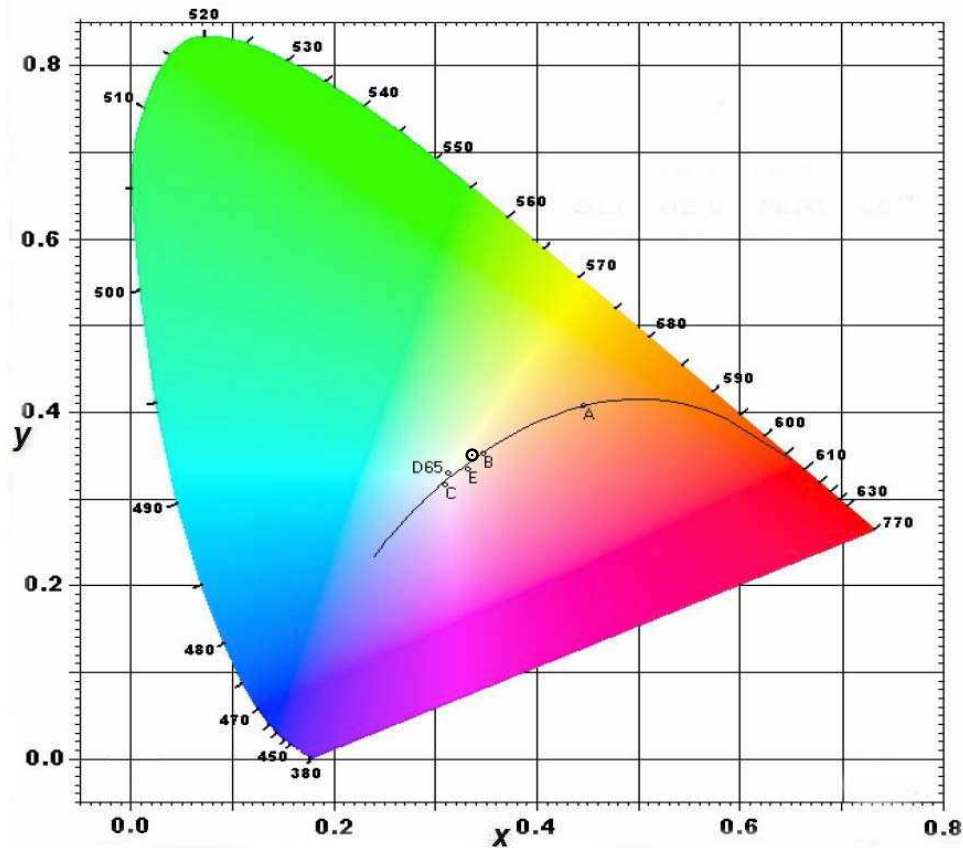
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Checked P O'CONNOR
Approved L GRABA
Lighting Engineer



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CIE Chromaticity Diagram





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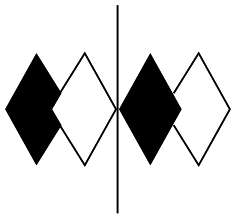
RESULTS:

SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.3360
Chromaticity Ordinate y	0.3503
Observer	CIE 1976 2 degree
Chromaticity Ordinate u'	0.2058
Chromaticity Ordinate v'	0.4827
Correlated Color Temp CCT (K)	5355
ANSI C78.377-2008 Duv	0.003
Total Radiant Flux (milliWatts)	2508 *
ELECTRICAL	
Input Voltage (Volts AC)	120.0
Input Current (Amps AC)	0.134
Input Power (Watts)	16.0
Input Power Factor (%)	99.5
Input Current THD (%)	11.2
Input Voltage THD (%)	0.1
Off-State Power (Watts)	
	0.0
ELECTRICAL AT MAX NONIMAL INPUT	
Input Voltage (Volts AC)	277.0
Input Current (Amps AC)	0.068
Input Power (Watts)	16.7
Input Power Factor (%)	88.7
Input Current THD (%)	22.6
Input Voltage THD (%)	0.1

COLOR RENDERING INDICES	CRI
Ra (Average 1-8)	69
R1 Light greyish red	67
R2 Dark greyish yellow	73
R3 Strong yellowish green	75
R4 Moderate yellowish green	71
R5 Light bluish green	68
R6 Light blue	63
R7 Light violet	79
R8 Light reddish purple	58
R9 Strong red	-29
R10 Strong yellow	35
R11 Strong green	67
R12 Strong blue	37
R13 Light yellowish pink (skin)	67
R14 Moderate olive green (leaf)	86

*NOTE:

Proper calibration of integrating spheres for measuring total flux output of non-directional samples will produce reliable, repeatable results within the calibration tolerances of the equipment used. However, measurement of test samples with significant self absorption and/or directional output, even when these effects are compensated for, are likely to have a greater variation in results compared to the flux output calculated from a goniophotometric exploration since these artifacts do not affect the goniophotometric results.



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RESULTS:

Wavelength	mW per nm	Wavelength	mW per nm	Wavelength	mW per nm
380	0.053	515	8.866	650	5.117
385	0.070	520	10.366	655	4.628
390	0.085	525	11.603	660	4.167
395	0.109	530	12.572	665	3.738
400	0.162	535	13.233	670	3.346
405	0.285	540	13.701	675	2.989
410	0.547	545	14.003	680	2.661
415	1.084	550	14.162	685	2.360
420	2.115	555	14.215	690	2.095
425	3.950	560	14.200	695	1.851
430	6.832	565	14.094	700	1.633
435	10.789	570	13.897	705	1.439
440	16.413	575	13.627	710	1.270
445	22.872	580	13.292	715	1.117
450	22.973	585	12.883	720	0.982
455	15.633	590	12.420	725	0.865
460	9.561	595	11.901	730	0.760
465	6.349	600	11.347	735	0.669
470	4.133	605	10.738	740	0.588
475	2.792	610	10.105	745	0.517
480	2.197	615	9.432	750	0.456
485	2.009	620	8.747	755	0.403
490	2.199	625	8.072	760	0.353
495	2.868	630	7.428	765	0.310
500	3.999	635	6.804	770	0.273
505	5.504	640	6.206	775	0.240
510	7.193	645	5.639	780	0.213

