

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION

Values based on 15 foot mounting height.



REPORT NUMBER: RAB00957

ISSUE DATE: 08/03/15 PAGE: 1 OF 9

DATE SAMPLE TESTED: 08/03/15

PREPARED FOR: RAB LIGHTING INC.

CATALOG NUMBER: ALED5T26Y (TYPE V - Short - Semicutoff)

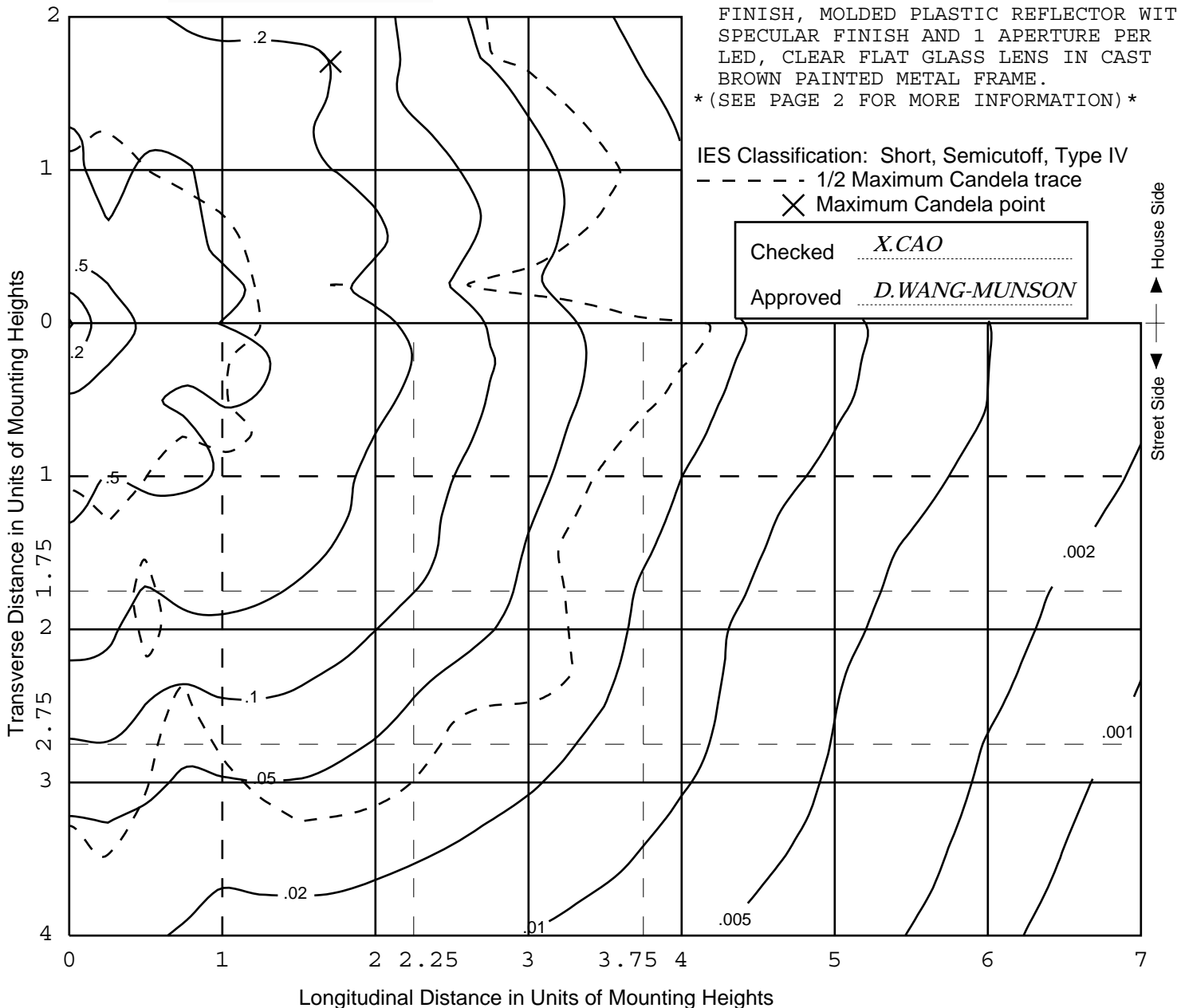
LUMINAIRE: CAST BROWN PAINTED METAL POSTTOP FITTER WITH 3 FABRICATED BROWN PAINTED METAL VERTICAL POSTS, CAST 2-PIECE BROWN PAINTED FINNED METAL HOUSING, 4 CAST METAL HEAT SINKS/CIRCUIT BOARD MOUNTING BRACKETS, 4 CIRCUIT BOARDS EACH WITH 1 LED AND MOLDED PLASTIC CIRCUIT BOARD PERIMETER OVERLAY WITH SPECULAR FINISH, MOLDED PLASTIC REFLECTOR WITH SPECULAR FINISH AND 1 APERTURE PER LED, CLEAR FLAT GLASS LENS IN CAST BROWN PAINTED METAL FRAME.

(SEE PAGE 2 FOR MORE INFORMATION)

IES Classification: Short, Semicutoff, Type IV

--- 1/2 Maximum Candela trace

X Maximum Candela point



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ADDITIONAL INFORMATION

LAMPS: FOUR WHITE MULTI-CHIP LIGHT EMITTING DIODES (LEDs), AIMED AT THE HORIZON.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.

TOTAL INPUT WATTS =29.082 AT 277.0 VAC.

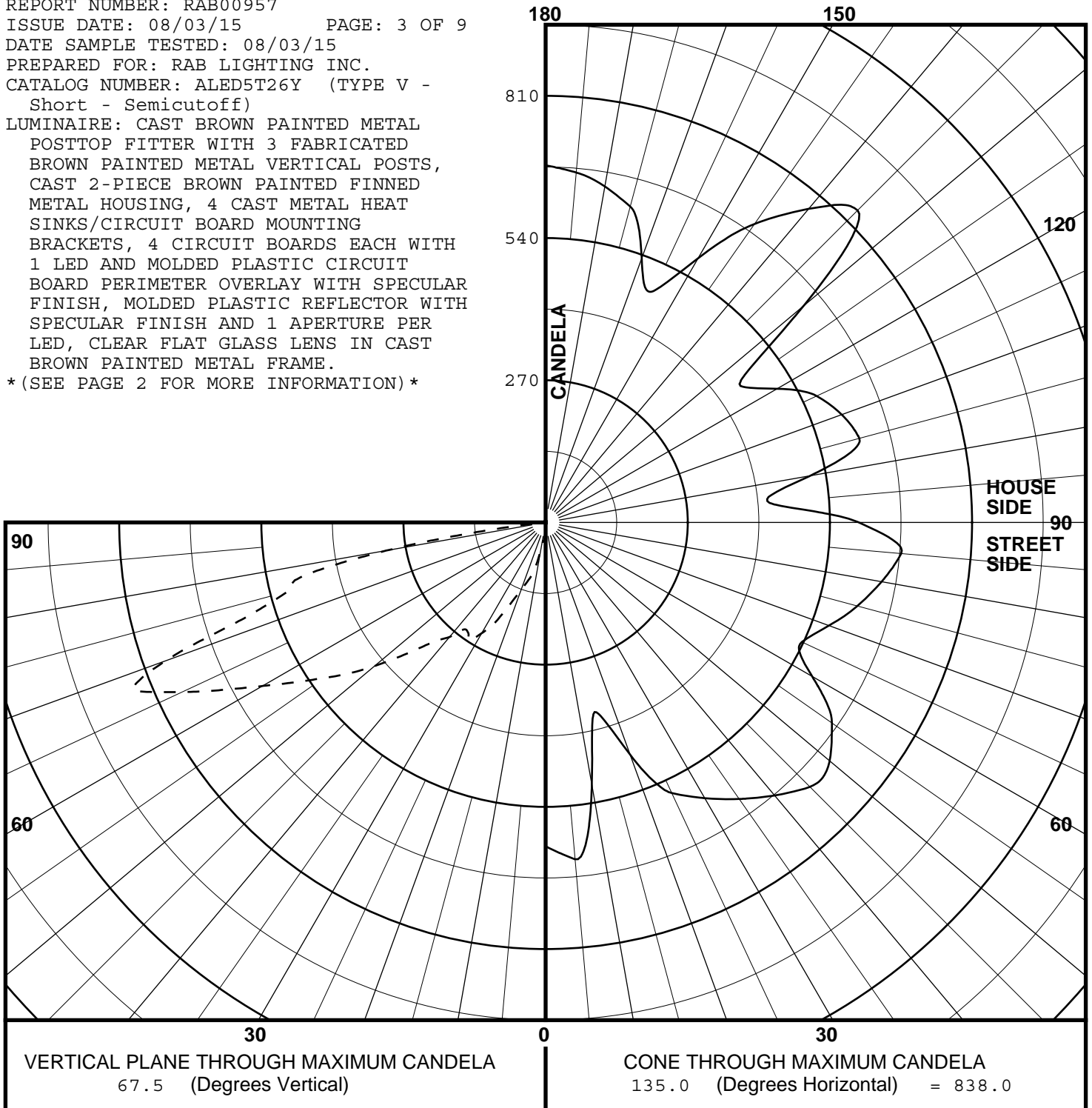
LED DRIVER: RDD-U26-A0720

TEST PROCEDURE: IESNA LM-79-08

ACCREDITED LABORATORY CODE 201058-0

MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA

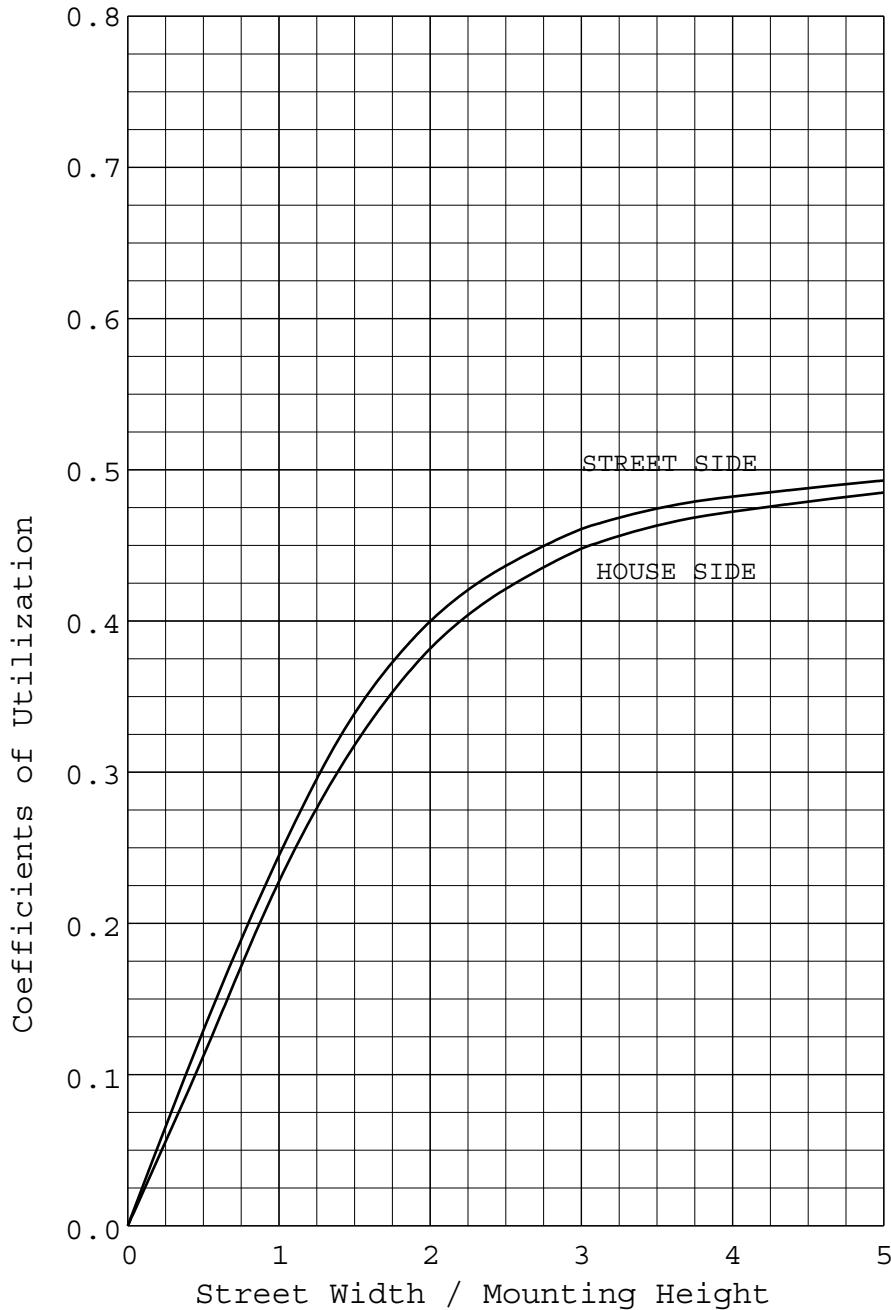
REPORT NUMBER: RAB00957
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 PREPARED FOR: RAB LIGHTING INC.
 CATALOG NUMBER: ALED5T26Y (TYPE V -
 Short - Semicutoff)
 LUMINAIRE: CAST BROWN PAINTED METAL
 POSTTOP FITTER WITH 3 FABRICATED
 BROWN PAINTED METAL VERTICAL POSTS,
 CAST 2-PIECE BROWN PAINTED FINNED
 METAL HOUSING, 4 CAST METAL HEAT
 SINKS/CIRCUIT BOARD MOUNTING
 BRACKETS, 4 CIRCUIT BOARDS EACH WITH
 1 LED AND MOLDED PLASTIC CIRCUIT
 BOARD PERIMETER OVERLAY WITH SPECULAR
 FINISH, MOLDED PLASTIC REFLECTOR WITH
 SPECULAR FINISH AND 1 APERTURE PER
 LED, CLEAR FLAT GLASS LENS IN CAST
 BROWN PAINTED METAL FRAME.
 *(SEE PAGE 2 FOR MORE INFORMATION) *



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COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	1034.	50.2
DOWNWARD HOUSE SIDE	1020.	49.5
DOWNWARD TOTAL	2054.	99.7
UPWARD STREET SIDE	3.	0.2
UPWARD HOUSE SIDE	3.	0.2
UPWARD TOTAL	7.	0.3
TOTAL FLUX	2061.	100.0
TOTAL INPUT WATTS = 29.1		
EFFICACY = 70.8 Lm/W		

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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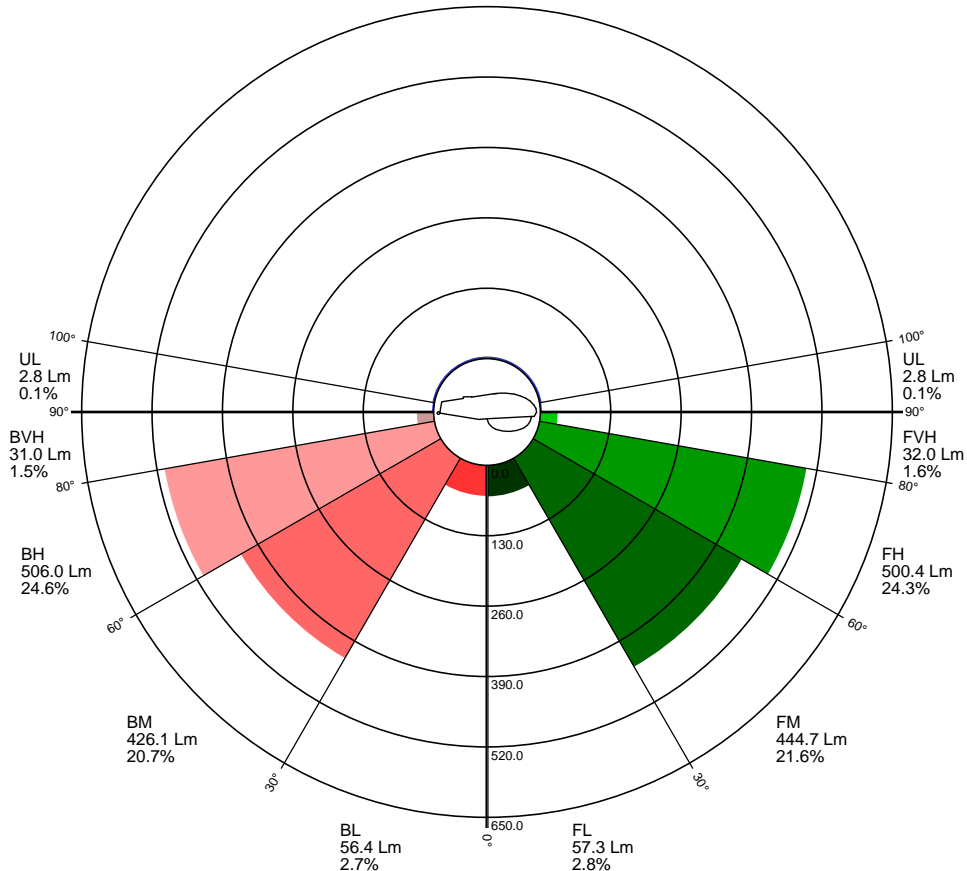
PAGE: 5 OF 9
 DATE SAMPLE TESTED: 08/03/15

BUG Rating:				B2 U1 G1		
Zonal Summary				Zone Ratings		
		Lumens	% of Fixture	B	U	G
<hr/>						
Forward		1034	50.2			
FL	(0° - 30°)	57.3	2.8			
FM	(30° - 60°)	444.7	21.6			
FH	(60° - 80°)	500.4	24.3			G0
FVH	(80° - 90°)	32.0	1.6			G1
Backward		1020	49.5			
BL	(0° - 30°)	56.4	2.7	B0		
BM	(30° - 60°)	426.1	20.7	B1		
BH	(60° - 80°)	506.0	24.6	B2		G0
BVH	(80° - 90°)	31.0	1.5			G1
Upward		7	0.3			
UL	(90° - 100°)	2.8	0.1		U1	
UH	(100° - 180°)	3.9	0.2		U1	
Trapped Light		0	0.0			
Total Flux		2061	100.0			

Zonal Lumen Summary

(Linear scale)

UH
3.9 Lm
0.2%



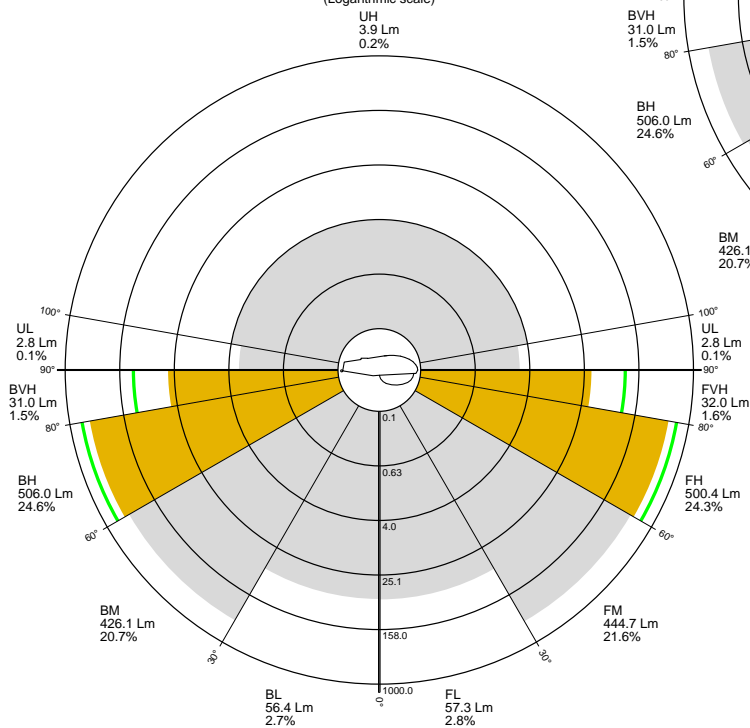
(Logarithmic scale)



(Logarithmic scale)



(Logarithmic scale)



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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
	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.	1.	1.	1.	0.	1.	1.	1.
	115.0	1.	1.	1.	1.	1.	1.	1.	1.	1.
	105.0	1.	2.	2.	2.	2.	2.	2.	2.	2.
	95.0	2.	3.	3.	3.	2.	3.	2.	2.	3.
	90.0	2.	2.	3.	3.	3.	3.	2.	2.	3.
	87.5	4.	5.	4.	5.	5.	5.	4.	4.	7.
	85.0	28.	19.	14.	15.	14.	22.	17.	11.	12.
V	82.5	140.	145.	74.	91.	86.	90.	84.	76.	86.
E	80.0	322.	308.	167.	208.	229.	251.	249.	196.	203.
R	77.5	374.	356.	237.	284.	336.	386.	364.	273.	287.
T	75.0	373.	391.	277.	399.	424.	401.	458.	386.	399.
I	72.5	432.	470.	329.	497.	537.	484.	571.	476.	482.
C	70.0	532.	562.	361.	552.	629.	646.	658.	527.	558.
A	67.5<<	615.	642.	373.	567.	641.	710.	664.	537.	613.
L	65.0	645.	645.	358.	571.	651.	666.	645.	548.	621.
	62.5	618.	617.	354.	569.	644.	628.	599.	563.	587.
A	60.0	572.	574.	360.	564.	617.	610.	541.	563.	566.
N	57.5	542.	545.	366.	552.	596.	593.	458.	559.	553.
G	55.0	522.	525.	366.	525.	559.	568.	370.	541.	537.
L	52.5	500.	499.	365.	491.	519.	525.	319.	505.	514.
E	50.0	472.	457.	358.	445.	474.	487.	285.	456.	471.
	47.5	424.	396.	337.	398.	440.	442.	258.	415.	424.
	45.0	382.	335.	316.	363.	399.	393.	227.	380.	381.
	42.5	349.	286.	303.	340.	359.	346.	210.	351.	349.
	40.0	328.	253.	301.	308.	327.	289.	200.	324.	322.
	37.5	311.	227.	284.	277.	281.	248.	198.	292.	299.
	35.0	302.	217.	269.	255.	246.	234.	211.	266.	279.
	30.0	236.	206.	259.	223.	208.	187.	227.	222.	271.
	25.0	158.	172.	205.	191.	137.	143.	192.	176.	222.
	20.0	82.	89.	142.	140.	133.	129.	122.	113.	151.
	15.0	52.	56.	79.	110.	104.	114.	109.	96.	88.
	10.0	33.	34.	36.	42.	45.	47.	49.	46.	41.
	5.0	22.	22.	23.	23.	27.	29.	30.	28.	25.
	0.0	19.	19.	19.	19.	19.	19.	19.	19.	19.

CONE OF MAXIMUM CANDELA

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CANDELA TABULATION

HOUSE SIDE

LATERAL ANGLE

	90.0	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.	0.
175.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
165.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
155.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
145.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
135.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
125.0	1.	1.	1.	0.	1.	1.	1.	1.	1.	1.	1.
115.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
105.0	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.
95.0	2.	2.	3.	3.	3.	3.	3.	3.	3.	2.	3.
90.0	3.	3.	3.	2.	2.	3.	3.	3.	3.	2.	3.
87.5	6.	5.	4.	3.	4.	5.	5.	4.	5.	6.	6.
85.0	21.	16.	12.	11.	12.	17.	15.	12.	13.	19.	20.
V 82.5	133.	104.	91.	77.	71.	97.	86.	63.	102.	133.	120.
E 80.0	290.	225.	225.	192.	181.	307.	263.	162.	208.	319.	279.
R 77.5	412.	315.	321.	275.	286.	474.	393.	255.	301.	467.	446.
T 75.0	429.	343.	421.	389.	372.	508.	465.	347.	428.	488.	461.
I 72.5	480.	379.	518.	473.	415.	594.	592.	422.	522.	555.	560.
C 70.0	534.	398.	592.	537.	456.	769.	693.	471.	600.	622.	626.
A 67.5<<	595.	427.	617.	568.	452.	838.	692.	485.	621.	667.	678.
L 65.0	598.	396.	607.	578.	423.	762.	661.	501.	597.	657.	671.
62.5	554.	364.	583.	576.	418.	688.	642.	518.	567.	610.	617.
A 60.0	508.	344.	567.	569.	430.	621.	621.	530.	541.	570.	568.
N 57.5	476.	327.	556.	544.	450.	565.	587.	523.	508.	542.	540.
G 55.0	457.	316.	543.	502.	453.	515.	545.	506.	458.	521.	519.
L 52.5	435.	305.	512.	440.	442.	471.	505.	472.	402.	496.	492.
E 50.0	401.	282.	469.	370.	418.	424.	470.	436.	336.	452.	454.
47.5	358.	254.	419.	316.	387.	378.	437.	401.	278.	410.	406.
45.0	315.	228.	379.	282.	361.	336.	393.	373.	240.	374.	366.
42.5	279.	205.	349.	265.	336.	304.	355.	349.	212.	350.	345.
40.0	252.	187.	328.	234.	315.	284.	316.	296.	193.	330.	328.
37.5	236.	189.	303.	215.	296.	256.	263.	263.	183.	312.	310.
35.0	231.	190.	282.	209.	284.	256.	237.	240.	174.	308.	309.
30.0	205.	186.	252.	215.	267.	243.	182.	213.	171.	284.	284.
25.0	174.	156.	186.	198.	209.	188.	135.	156.	154.	199.	222.
20.0	135.	129.	119.	151.	127.	137.	148.	133.	117.	85.	81.
15.0	79.	77.	87.	94.	98.	105.	125.	96.	76.	62.	63.
10.0	37.	37.	40.	43.	42.	51.	46.	45.	42.	37.	36.
5.0	23.	22.	22.	25.	32.	35.	35.	27.	24.	23.	22.
0.0	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.

||
 PLANE OF MAXIMUM CANDELA

CONE OF MAXIMUM CANDELA

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5-DEGREE ZONAL LUMEN SUMMARY

0- 5	1
5- 10	2
10- 15	8
15- 20	18
20- 25	33
25- 30	51
30- 35	71
35- 40	88
40- 45	116
45- 50	154
50- 55	200
55- 60	241
60- 65	276
65- 70	299
70- 75	256
75- 80	175
80- 85	59
85- 90	4
90- 95	1
95-100	1
100-105	1
105-110	1
110-115	1
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	3
0- 20	29
0- 30	114
0- 40	273
0- 50	543
0- 60	984
0- 70	1559
0- 80	1991
0- 90	2054
0-100	2057
0-110	2059
0-120	2060
0-130	2061
0-140	2061
0-150	2061
0-160	2061
0-170	2061
0-180	2061

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DATE: 7/31/2015
PREPARED FOR: RAB LIGHTING INC.
CATALOG NUMBER: ALED5T26Y (TYPE V - Short - Semicutoff)

ADDRESS: 170 LUDLOW AVE, NORTHVALE, NJ 07647

LUMINAIRE: CAST BROWN PAINTED METAL POSTTOP FITTER WITH 3 FABRICATED BROWN PAINTED METAL VERTICAL POSTS, CAST 2-PIECE BROWN PAINTED FINNED METAL HOUSING, 4 CAST METAL HEAT SINKS/CIRCUIT BOARD MOUNTING BRACKETS, 4 CIRCUIT BOARDS EACH WITH 1 LED AND MOLDED PLASTIC CIRCUIT BOARD PERIMETER OVERLAY WITH SPECULAR FINISH, MOLDED PLASTIC REFLECTOR WITH SPECULAR FINISH AND 1 APERTURE PER LED, CLEAR FLAT GLASS LENS IN CAST BROWN PAINTED METAL FRAME.

LAMP: FOUR WHITE MULTI-CHIP LIGHT EMITTING DIODES (LEDs), AIMED AT THE HORIZON.

DRIVER: RDD-U26-A0720

OBJECT OF TEST: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT THE RATED INPUT VOLTAGES (120.0 AND 277.0 VAC, 60Hz) TO THE TEST SAMPLE.

INSTRUMENTS:	CHROMA PROGRAMMABLE AC POWER SOURCE MODEL 61602	Calibration Due: N/A
	CHROMA PROGRAMMABLE DIGITAL POWER METER MODEL 66202	3/9/16
	OCEAN OPTICS QE65PRO Spectroradiometer	7/24/16
	RAB 2.0 meter Diameter Integrating Sphere, 4PI Geometry	7/24/16

OBJECT OF TEST: Measure the Absolute Flux in lumens*, 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. Measure electrical data including Total Harmonic Distortion (THD) at maximum nominal rated input voltage. Report Off-State Power.

PROCEDURE: The test sample was mounted inside the integrating sphere, energized, 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 60 HZ input in a 25 +/-1 degree Celsius free air ambient and in accordance with IESNA LM-79-08. Electrical data was also recorded at maximum nominal rated input voltage (277.0 VAC). 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.

RESULTS: (continued subsequent pages)

Checked X.CAO

Approved D.WANG-MUNSON
Lighting Engineer

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RESULTS:

PHOTOMETRIC	
Total Integrated Flux (lumens)	2061 *
SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.4348
Chromaticity Ordinate y	0.4091
Observer	CIE 1976 2 degree
Chromaticity Ordinate u'	0.2471
Chromaticity Ordinate v'	0.5230
Correlated Color Temp CCT (K)	3077
ANSI C78.377-2008 Duv	0.002
Total Radiant Flux (milliWatts)	6127 *
ELECTRICAL	
Input Voltage (Volts AC)	120.0
Input Current (Amps AC)	0.238
Input Power (Watts)	28.4
Input Power Factor (%)	99.4
Input Current THD (%)	8.8
Input Voltage THD (%)	0.2
EFFICACY (Lumens/Watt)	
	72.6
ELECTRICAL AT MAX NONIMAL INPUT	
Input Voltage (Volts AC)	277.0
Input Current (Amps AC)	0.117
Input Power (Watts)	29.1
Input Power Factor (%)	89.8
Input Current THD (%)	20.0
Input Voltage THD (%)	0.2
Off-State Power (Watts)	
	0.0

COLOR RENDERING INDICES	CRI
Ra (Average 1-8)	84
R1 Light greyish red	82
R2 Dark greyish yellow	90
R3 Strong yellowish green	97
R4 Moderate yellowish green	84
R5 Light bluish green	83
R6 Light blue	89
R7 Light violet	85
R8 Light reddish purple	61
R9 Strong red	9
R10 Strong yellow	77
R11 Strong green	85
R12 Strong blue	67
R13 Light yellowish pink (skin)	84
R14 Moderate olive green (leaf)	98

*NOTE:

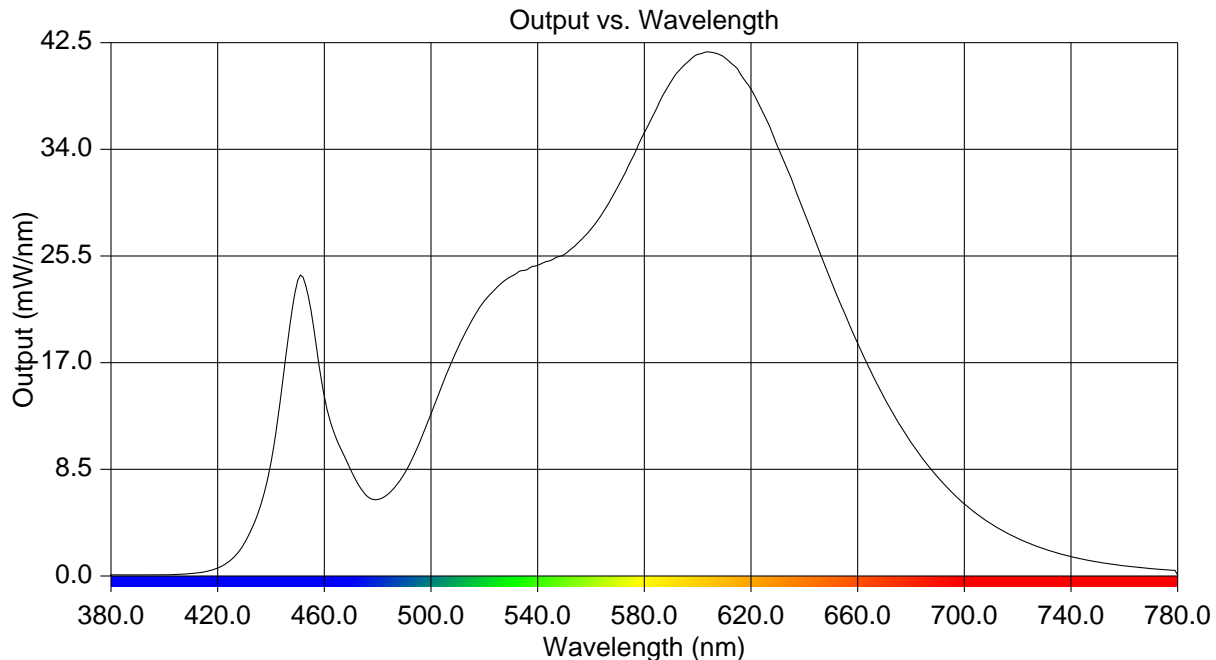
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RESULTS:

Wavelength	mW per nm	Wavelength	mW per nm	Wavelength	mW per nm
380	0.087	515	20.245	650	23.554
385	0.086	520	21.909	655	21.001
390	0.087	525	23.052	660	18.527
395	0.085	530	23.869	665	16.249
400	0.098	535	24.350	670	14.196
405	0.123	540	24.749	675	12.305
410	0.189	545	25.152	680	10.663
415	0.326	550	25.623	685	9.176
420	0.639	555	26.527	690	7.863
425	1.279	560	27.629	695	6.741
430	2.596	565	29.165	700	5.745
435	4.924	570	31.015	705	4.884
440	9.035	575	33.094	710	4.170
445	16.548	580	35.357	715	3.537
450	23.542	585	37.433	720	3.001
455	21.177	590	39.395	725	2.535
460	14.299	595	40.719	730	2.141
465	10.677	600	41.565	735	1.827
470	8.415	605	41.733	740	1.537
475	6.599	610	41.328	745	1.313
480	6.090	615	40.398	750	1.118
485	6.756	620	38.803	755	0.949
490	8.143	625	36.718	760	0.805
495	10.286	630	34.200	765	0.684
500	12.911	635	31.747	770	0.587
505	15.645	640	28.975	775	0.501
510	18.152	645	26.208	780	0.075



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CIE Chromaticity Diagram

