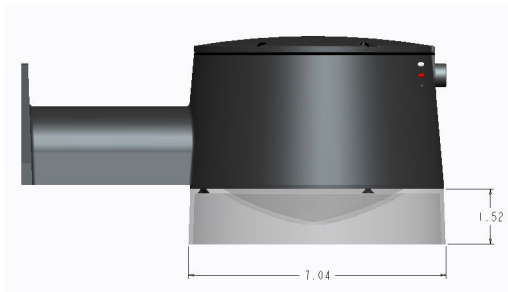


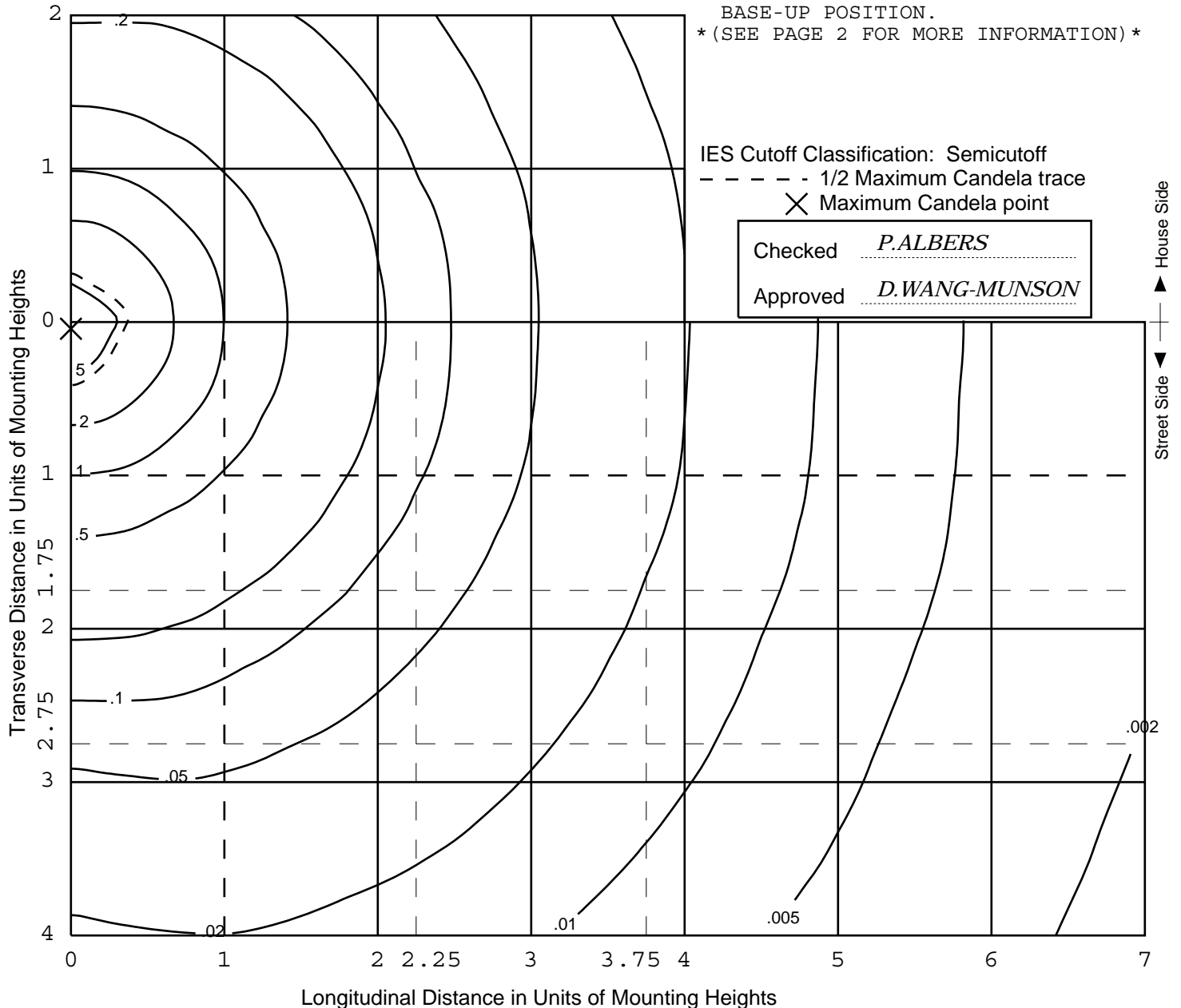
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION

Values based on 15 foot mounting height.



REPORT NUMBER: RAB04241
ISSUE DATE: 04/05/18 PAGE: 1 OF 9
DATE SAMPLE TESTED: 04/05/18
CATALOG NUMBER: YBLED26Y - YBLED26Y-ARM
(TYPE V)
LUMINAIRE: CAST FINNED METAL HOUSING
WITH WHITE PAINTED INTERIOR, 1
CIRCUIT BOARD WITH 1 LED WITH MOLDED
WHITE PLASTIC TRIM, CLEAR INTERIOR
FROSTED CYLINDRICAL LENS WITH
RECESSED EXTERIOR-FROSTED CONVEX
CENTER. CONVEX CENTER HAS CONCENTRIC
CIRCULAR EXTERIOR PRISMS.
LAMP: ONE WHITE MULTI-CHIP LIGHT
EMITTING DIODE (LED), VERTICAL
BASE-UP POSITION.

(SEE PAGE 2 FOR MORE INFORMATION)



REPORT NUMBER: RAB04241

PAGE: 2 OF 9

ISSUE DATE: 04/05/18

DATE SAMPLE TESTED: 04/05/18

CATALOG NUMBER: YBLED26Y - YBLED26Y-ARM (TYPE V)

ADDITIONAL INFORMATION

NOTE: THIS REPORT WITH THE USE OF THE NVLAP LOGO SHALL NOT BE USED BY THE CLIENT TO CLAIM PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NVLAP, NIST, OR ANY AGENCY OF THE FEDERAL GOVERNMENT.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.

TOTAL INPUT WATTS = 29.634 W AT 277.0 VAC.

LED DRIVER: RD-042-A0700N

TEST PROCEDURE: IESNA LM-79-08

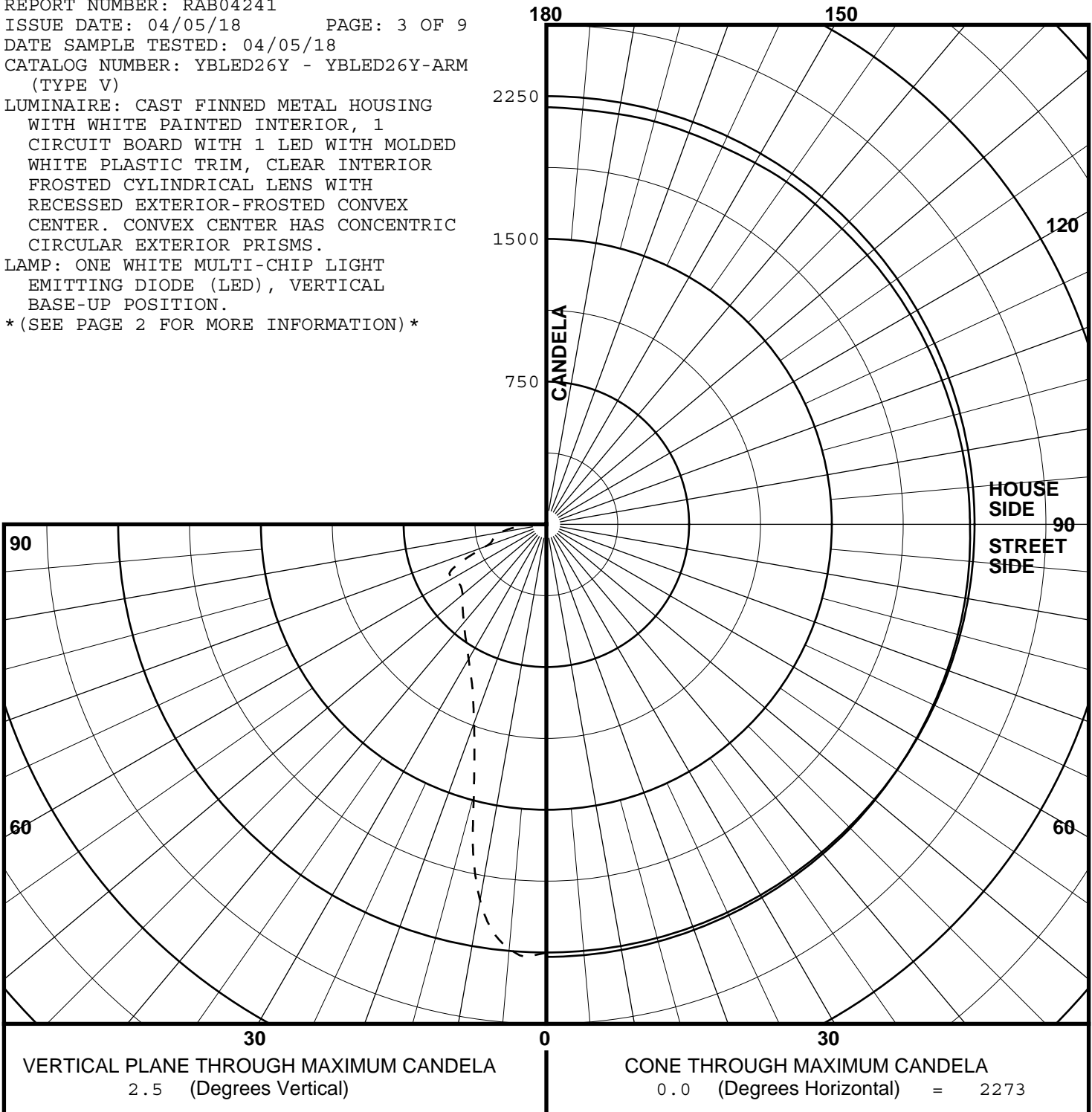
LM-80 DATA AVAILABLE FROM MANUFACTURER FOR SOLID STATE SOURCE

AMBIENT: 24.9

ACCREDITED LABORATORY CODE 201058-0

MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA

REPORT NUMBER: RAB04241
 ISSUE DATE: 04/05/18 PAGE: 3 OF 9
 DATE SAMPLE TESTED: 04/05/18
 CATALOG NUMBER: YBLED26Y - YBLED26Y-ARM
 (TYPE V)
 LUMINAIRE: CAST FINNED METAL HOUSING
 WITH WHITE PAINTED INTERIOR, 1
 CIRCUIT BOARD WITH 1 LED WITH MOLDED
 WHITE PLASTIC TRIM, CLEAR INTERIOR
 FROSTED CYLINDRICAL LENS WITH
 RECESSED EXTERIOR-FROSTED CONVEX
 CENTER. CONVEX CENTER HAS CONCENTRIC
 CIRCULAR EXTERIOR PRISMS.
 LAMP: ONE WHITE MULTI-CHIP LIGHT
 EMITTING DIODE (LED), VERTICAL
 BASE-UP POSITION.
 *(SEE PAGE 2 FOR MORE INFORMATION) *



REPORT NUMBER: RAB04241

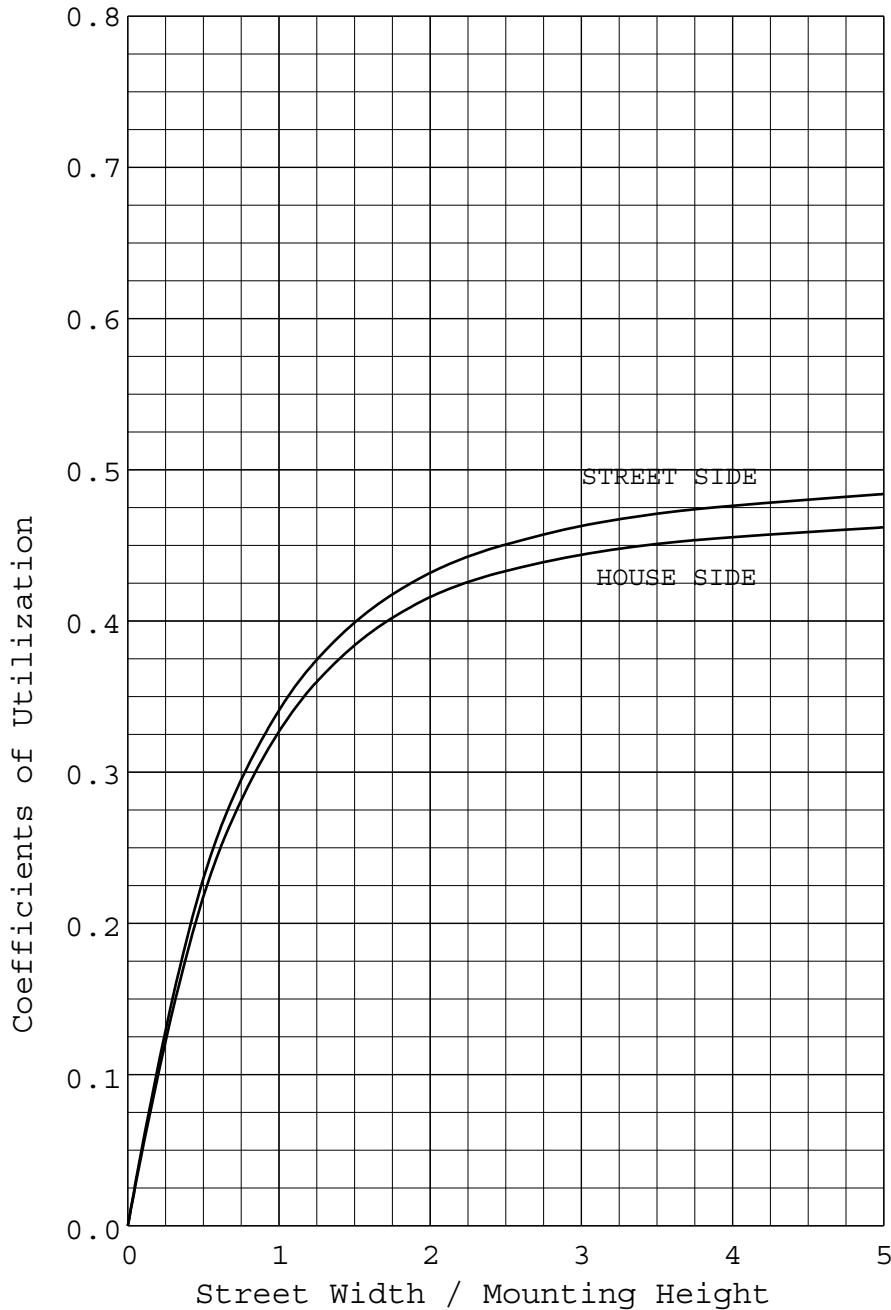
PAGE: 4 OF 9

ISSUE DATE: 04/05/18

DATE SAMPLE TESTED: 04/05/18

CATALOG NUMBER: YBLED26Y - YBLED26Y-ARM (TYPE V)

COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	1769.	50.1
DOWNWARD HOUSE SIDE	1679.	47.6
DOWNWARD TOTAL	3448.	97.7
UPWARD STREET SIDE	46.	1.3
UPWARD HOUSE SIDE	36.	1.0
UPWARD TOTAL	82.	2.3
TOTAL FLUX	3531.	100.0
TOTAL INPUT WATTS = 29.6		
EFFICACY = 119.3 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.

REPORT NUMBER: RAB04241

ISSUE DATE: 04/05/18

PAGE: 5 OF 9

DATE SAMPLE TESTED: 04/05/18

CATALOG NUMBER: YBLED26Y - YBLED26Y-ARM (TYPE V)

BUG Rating:

Zonal Summary

Lumens

% of Fixture

B1 U2 G1

Zone Ratings

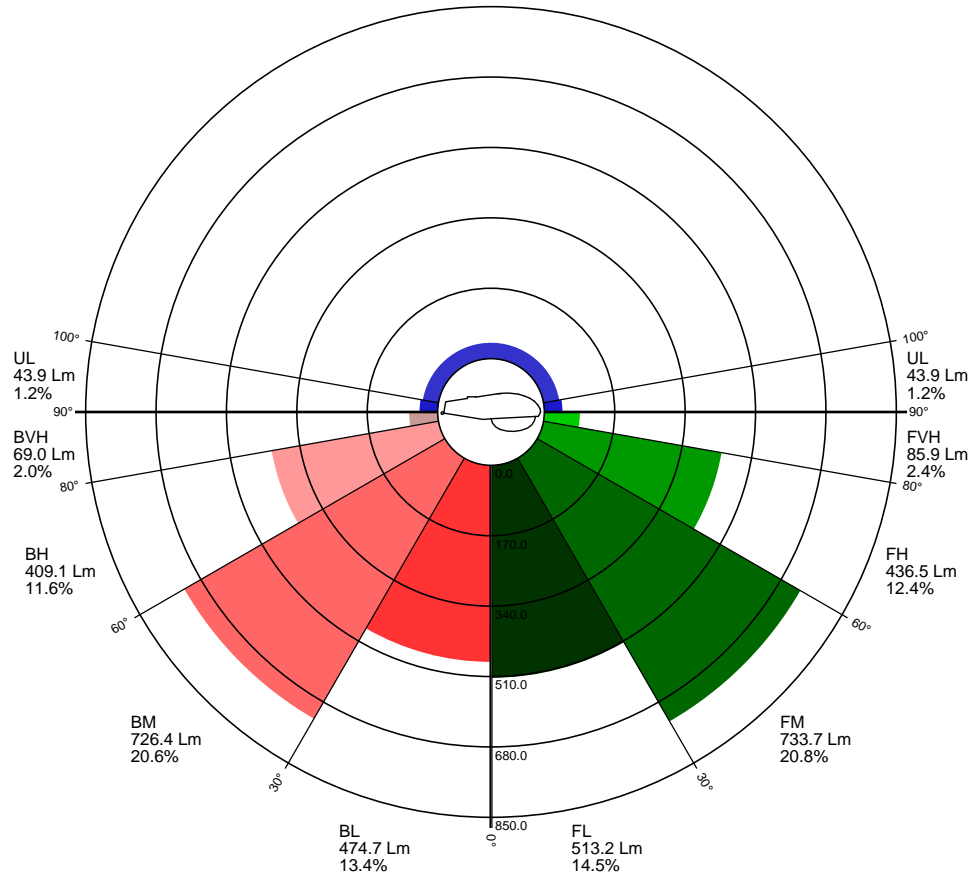
B U G

Forward		1769	50.1			
FL	(0° - 30°)	513.2	14.5			
FM	(30° - 60°)	733.7	20.8			
FH	(60° - 80°)	436.5	12.4			G0
FVH	(80° - 90°)	85.9	2.4			G1
Backward		1679	47.6			
BL	(0° - 30°)	474.7	13.4	B1		
BM	(30° - 60°)	726.4	20.6	B1		
BH	(60° - 80°)	409.1	11.6	B1		G0
BVH	(80° - 90°)	69.0	2.0			G1
Upward		82	2.3			
UL	(90° - 100°)	43.9	1.2		U2	
UH	(100° - 180°)	38.4	1.1		U2	
Trapped Light		0	0.0			
Total Flux		3531	100.0			

Zonal Lumen Summary

(Linear scale)

UH
38.4 Lm
1.1%



REPORT NUMBER: RAB04241

ISSUE DATE: 04/05/18

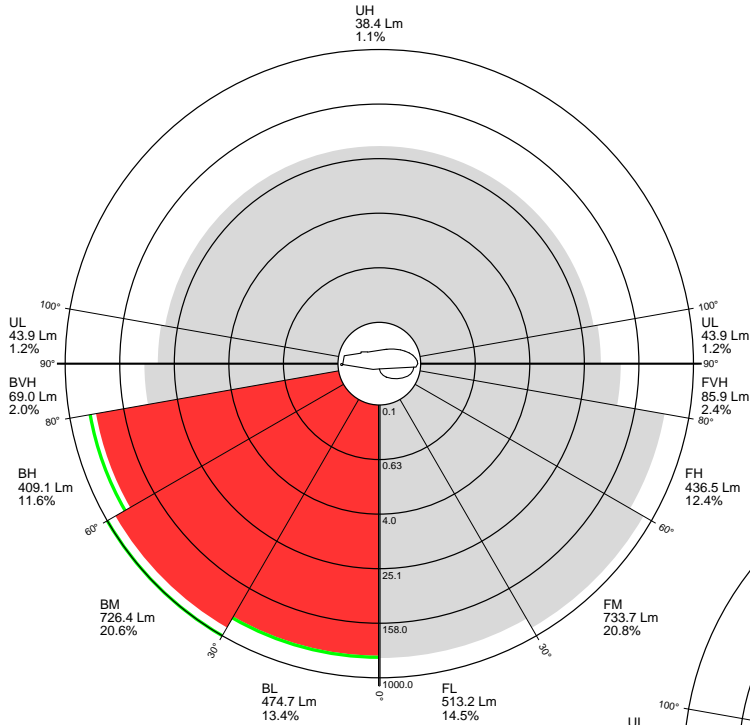
CATALOG NUMBER: YBLED26Y - YBLED26Y-ARM (TYPE V)

PAGE: 6 OF 9

DATE SAMPLE TESTED: 04/05/18

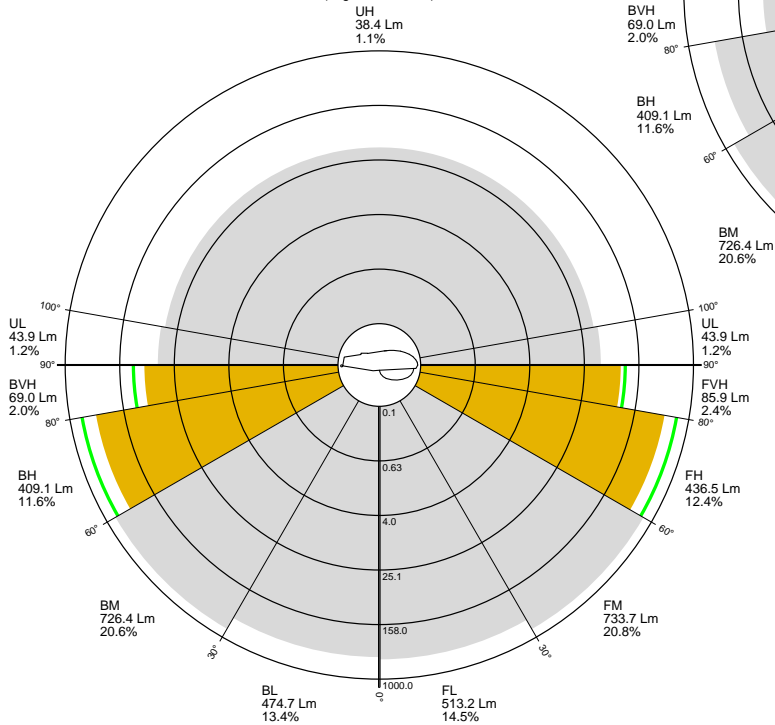
Backlight Rating Details

(Logarithmic scale)



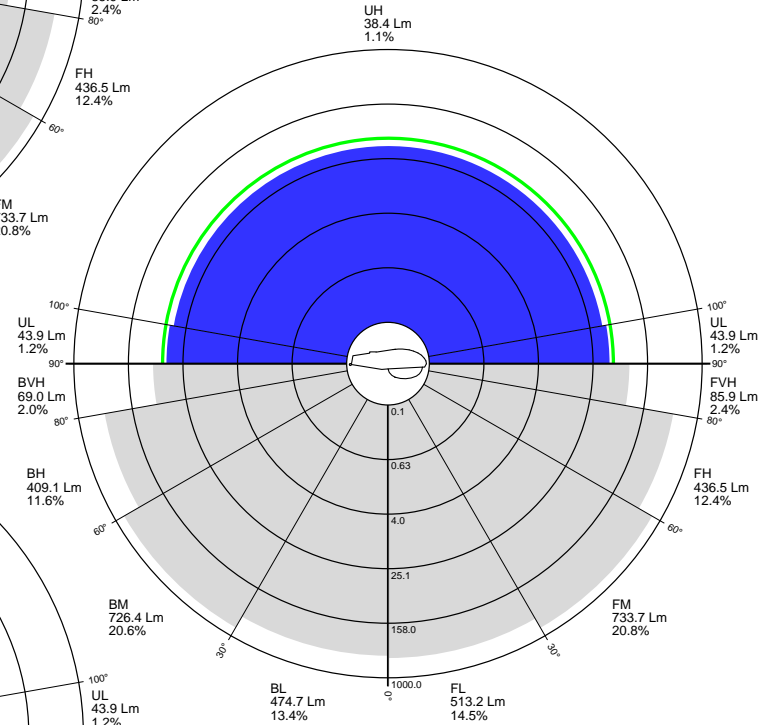
Glare Rating Details

(Logarithmic scale)



Uplight Rating Details

(Logarithmic scale)



REPORT NUMBER: RAB04241

PAGE: 7 OF 9

ISSUE DATE: 04/05/18

DATE SAMPLE TESTED: 04/05/18

CATALOG NUMBER: YBLED26Y - YBLED26Y-ARM (TYPE V)

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	1.	1.	1.	1.	1.	1.	1.	1.	1.
	165.0	1.	1.	1.	1.	1.	1.	1.	2.	1.
	155.0	2.	2.	2.	2.	2.	2.	2.	2.	2.
	145.0	3.	3.	2.	2.	2.	2.	2.	2.	2.
	135.0	4.	4.	4.	4.	4.	4.	3.	3.	4.
	125.0	7.	7.	7.	7.	7.	6.	6.	6.	6.
	115.0	13.	13.	13.	13.	13.	13.	13.	13.	13.
	105.0	17.	17.	18.	17.	18.	17.	16.	16.	15.
	95.0	48.	47.	46.	44.	44.	41.	40.	38.	37.
	90.0	89.	90.	87.	84.	80.	77.	73.	71.	68.
	87.5	120.	122.	120.	116.	112.	108.	104.	99.	93.
	85.0	159.	162.	163.	160.	157.	151.	146.	137.	128.
	82.5	203.	206.	221.	216.	217.	211.	203.	189.	177.
V	80.0	243.	253.	276.	280.	287.	280.	271.	253.	236.
E	77.5	273.	288.	330.	337.	349.	344.	335.	316.	295.
R	75.0	288.	307.	363.	374.	389.	384.	376.	363.	341.
T	72.5	301.	321.	378.	388.	401.	397.	393.	386.	365.
I	70.0	341.	358.	408.	411.	411.	409.	403.	403.	384.
C	67.5	435.	443.	474.	468.	462.	463.	456.	456.	441.
A	65.0	533.	538.	556.	546.	535.	530.	523.	517.	505.
L	62.5	572.	574.	580.	575.	571.	571.	569.	566.	564.
	60.0	569.	572.	576.	573.	570.	570.	571.	570.	571.
A	57.5	564.	565.	568.	568.	564.	564.	566.	566.	570.
N	55.0	554.	556.	560.	562.	559.	559.	561.	563.	566.
G	52.5	561.	563.	568.	571.	567.	566.	568.	571.	571.
L	50.0	575.	580.	584.	587.	582.	582.	584.	586.	584.
E	47.5	600.	604.	608.	611.	607.	606.	607.	609.	604.
	45.0	622.	625.	630.	633.	631.	631.	633.	634.	629.
	42.5	647.	650.	655.	659.	656.	659.	660.	661.	656.
	40.0	674.	677.	681.	685.	685.	686.	688.	687.	683.
	37.5	705.	707.	712.	715.	716.	718.	719.	719.	712.
	35.0	738.	740.	744.	747.	750.	752.	752.	750.	745.
	30.0	817.	818.	819.	825.	828.	828.	826.	822.	812.
	25.0	925.	927.	924.	926.	930.	924.	922.	915.	902.
	20.0	1111.	1113.	1103.	1105.	1101.	1092.	1082.	1069.	1047.
	15.0	1473.	1465.	1466.	1450.	1420.	1397.	1382.	1342.	1302.
	10.0	2006.	2018.	2004.	1999.	1959.	1941.	1895.	1876.	1799.
	5.0	2239.	2241.	2234.	2230.	2216.	2207.	2190.	2181.	2151.
	2.5<<	2273.	2272.	2270.	2267.	2262.	2258.	2250.	2244.	2231.
	0.0	2251.	2251.	2251.	2251.	2251.	2251.	2251.	2251.	2251.

||
PLANE OF MAXIMUM CANDELA

CONE OF MAXIMUM CANDELA

REPORT NUMBER: RAB04241

PAGE: 8 OF 9

ISSUE DATE: 04/05/18

DATE SAMPLE TESTED: 04/05/18

CATALOG NUMBER: YBLED26Y - YBLED26Y-ARM (TYPE V)

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.
	175.0	1.	1.	0.	1.	1.	0.	0.	0.	0.	1.
	165.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	155.0	2.	2.	2.	2.	1.	1.	1.	1.	1.	1.
	145.0	2.	2.	2.	2.	2.	1.	1.	1.	1.	1.
	135.0	4.	4.	3.	3.	3.	3.	2.	2.	2.	1.
	125.0	6.	7.	6.	6.	6.	5.	5.	4.	3.	2.
	115.0	13.	13.	13.	12.	12.	11.	11.	9.	5.	2.
	105.0	15.	15.	15.	15.	15.	16.	16.	13.	10.	7.
	95.0	37.	37.	36.	35.	34.	33.	33.	32.	26.	27.
	90.0	68.	67.	64.	64.	62.	60.	59.	59.	58.	58.
	87.5	93.	92.	88.	87.	85.	83.	81.	79.	79.	81.
	85.0	129.	127.	122.	122.	120.	117.	112.	110.	110.	111.
	82.5	177.	176.	173.	171.	170.	167.	159.	153.	154.	150.
V	80.0	237.	233.	233.	227.	236.	234.	222.	210.	211.	201.
E	77.5	296.	293.	295.	294.	305.	306.	292.	275.	274.	256.
R	75.0	342.	340.	345.	345.	356.	366.	353.	333.	328.	296.
T	72.5	365.	366.	373.	372.	382.	395.	389.	372.	360.	311.
I	70.0	383.	383.	388.	385.	392.	406.	401.	389.	373.	310.
C	67.5	436.	439.	433.	420.	421.	433.	430.	425.	400.	320.
A	65.0	506.	502.	506.	499.	498.	501.	504.	484.	463.	393.
L	62.5	562.	562.	564.	555.	555.	559.	559.	551.	550.	482.
	60.0	570.	571.	577.	577.	575.	577.	576.	573.	575.	563.
A	57.5	570.	571.	576.	577.	575.	573.	572.	570.	574.	572.
N	55.0	566.	567.	570.	573.	571.	568.	569.	570.	571.	568.
G	52.5	572.	573.	574.	575.	572.	567.	568.	569.	570.	570.
L	50.0	584.	585.	586.	585.	580.	575.	575.	576.	576.	575.
E	47.5	605.	604.	604.	602.	596.	590.	588.	589.	590.	591.
	45.0	629.	628.	627.	624.	618.	612.	610.	611.	613.	611.
	42.5	655.	652.	652.	648.	643.	638.	637.	638.	638.	635.
	40.0	682.	680.	678.	673.	667.	665.	662.	664.	665.	662.
	37.5	711.	710.	708.	703.	697.	695.	693.	694.	695.	691.
	35.0	744.	744.	741.	738.	734.	731.	731.	732.	732.	728.
	30.0	810.	811.	811.	809.	808.	808.	807.	806.	806.	803.
	25.0	901.	900.	899.	898.	899.	898.	893.	892.	889.	888.
	20.0	1041.	1039.	1031.	1029.	1025.	1019.	1014.	1008.	1003.	1002.
	15.0	1289.	1280.	1254.	1239.	1224.	1211.	1203.	1193.	1186.	1179.
	10.0	1770.	1761.	1736.	1701.	1673.	1619.	1608.	1600.	1574.	1557.
	5.0	2140.	2137.	2120.	2107.	2097.	2079.	2078.	2062.	2066.	2057.
	2.5<<	2226.	2225.	2216.	2210.	2205.	2197.	2198.	2189.	2192.	2188.
	0.0	2251.	2251.	2251.	2251.	2251.	2251.	2251.	2251.	2251.	2251.

CONE OF MAXIMUM CANDELA

REPORT NUMBER: RAB04241

PAGE: 9 OF 9

ISSUE DATE: 04/05/18

DATE SAMPLE TESTED: 04/05/18

PREPARED FOR: RAB LIGHTING INC. RC LIGHTING

5-DEGREE

ZONAL LUMEN SUMMARY

0- 5	53
5- 10	141
10- 15	181
15- 20	192
20- 25	204
25- 30	217
30- 35	229
35- 40	236
40- 45	241
45- 50	243
50- 55	249
55- 60	263
60- 65	267
65- 70	223
70- 75	194
75- 80	161
80- 85	101
85- 90	54
90- 95	29
95-100	15
100-105	9
105-110	8
110-115	7
115-120	5
120-125	3
125-130	2
130-135	2
135-140	1
140-145	1
145-150	1
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	194
0- 20	566
0- 30	988
0- 40	1452
0- 50	1936
0- 60	2448
0- 70	2938
0- 80	3294
0- 90	3448
0-100	3492
0-110	3509
0-120	3521
0-130	3526
0-140	3528
0-150	3529
0-160	3530
0-170	3531
0-180	3531

REPORT NUMBER: RAB04242
 DATE: 4/5/2018
 PREPARED FOR: RAB LIGHTING INC. RC LIGHTING
 CATALOG NUMBER: YBLED26Y - YBLED26Y-ARM (TYPE V)

ADDRESS: 170 LUDLOW AVE, NORTHVALE, NJ 07647

LUMINAIRE: CAST FINNED METAL HOUSING WITH WHITE PAINTED INTERIOR, 1 CIRCUIT BOARD WITH 1 LED WITH MOLDED WHITE PLASTIC TRIM, CLEAR INTERIOR FROSTED CYLINDRICAL LENS WITH RECESSED EXTERIOR-FROSTED CONVEX CENTER. CONVEX CENTER HAS CONCENTRIC CIRCULAR EXTERIOR PRISMS.

LAMP: ONE WHITE MULTI-CHIP LIGHT EMITTING DIODE (LED), VERTICAL BASE-UP POSITION.

DRIVER: RD-042-A0700N

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

INSTRUMENTS:	GWINSTEK PROGRAMMABLE AC POWER SOURCE APS-7100	Calibration Due: N/A
	CHROMA PROGRAMMABLE DIGITAL POWER METER MODEL 66202	3/08/19
	OCEAN OPTICS QE65PRO Spectroradiometer	02/22/19
	RAB 2.0 meter Diameter Integrating Sphere, 4PI Geometry	02/22/19

OBJECT OF TEST: Measure the Absolute Flux in lumens*, Total Radiant Flux*, Spectral Power Distribution (SPD), Correlated Color Temperature (CCT), Color Rendering Indices (CRI_a,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 (120.0 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

REPORT NUMBER: RAB04242
 DATE: 4/5/2018
 PREPARED FOR: RAB LIGHTING INC. RC LIGHTING
 CATALOG NUMBER: YBLED26Y - YBLED26Y-ARM (TYPE V)

Page 2 of 4

RESULTS:

PHOTOMETRIC	
Total Integrated Flux (lumens)	3531 *
SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.4386
Chromaticity Ordinate y	0.4057
Observer	CIE 1976 2 degree
Chromaticity Ordinate u'	0.2509
Chromaticity Ordinate v'	0.5223
Correlated Color Temp CCT (K)	2985
ANSI C78.377-2008 Duv	0.000
Total Radiant Flux (milliWatts)	10002 *
ELECTRICAL	
Input Voltage (Volts AC)	277.0
Input Current (Amps AC)	0.114
Input Power (Watts)	29.6
Input Power Factor (%)	93.6
Input Current THD (%)	12.4
Input Voltage THD (%)	0.2
EFFICACY (Lumens/Watt)	
	119.3
ELECTRICAL AT MAX NONIMAL INPUT	
Input Voltage (Volts AC)	120.0
Input Current (Amps AC)	0.236
Input Power (Watts)	28.1
Input Power Factor (%)	99.5
Input Current THD (%)	6.8
Input Voltage THD (%)	0.2
Off-State Power (Watts)	
	0.0

COLOR RENDERING INDICES	CRI
Ra (Average 1-8)	72
R1 Light greyish red	67
R2 Dark greyish yellow	82
R3 Strong yellowish green	95
R4 Moderate yellowish green	69
R5 Light bluish green	69
R6 Light blue	78
R7 Light violet	76
R8 Light reddish purple	40
R9 Strong red	-40
R10 Strong yellow	62
R11 Strong green	66
R12 Strong blue	61
R13 Light yellowish pink (skin)	70
R14 Moderate olive green (leaf)	97

*NOTE:

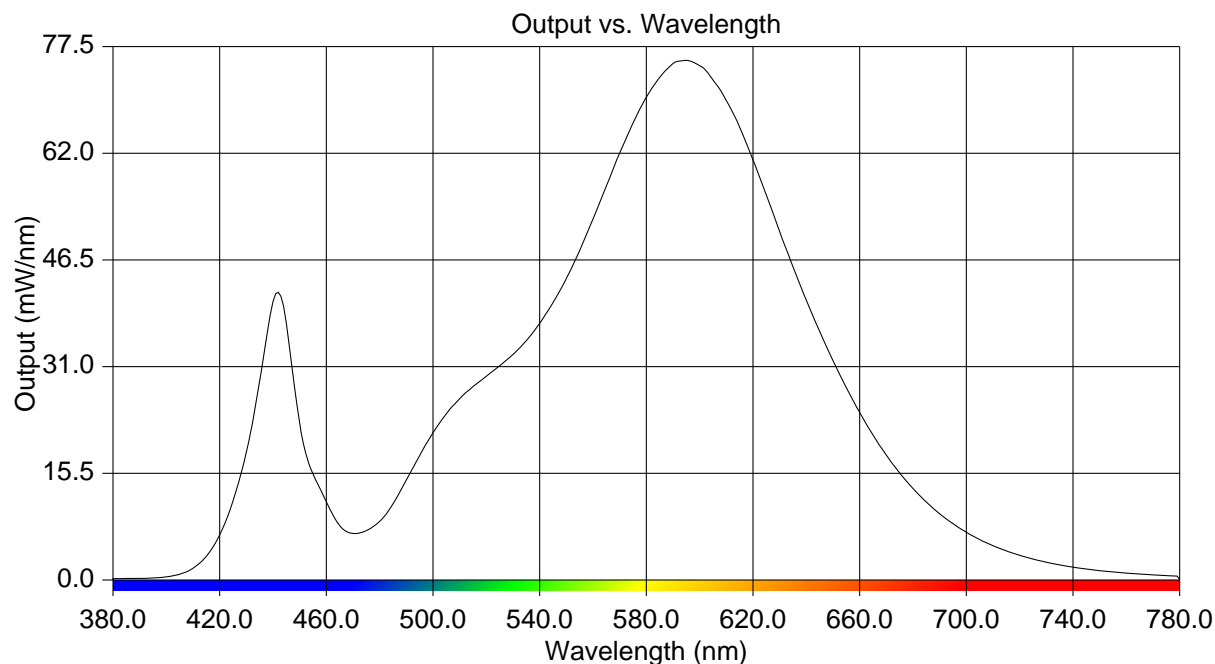
Proper calibration of integrating spheres for measuring total flux output of non-directional samples will produce reliable, repeatable results within the calibration tolerances of the equipment used. However, measurement of test samples with significant self absorption and/or directional output, even 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.

REPORT NUMBER: RAB04242
 DATE: 4/5/2018
 PREPARED FOR: RAB LIGHTING INC. RC LIGHTING
 CATALOG NUMBER: YBLED26Y - YBLED26Y-ARM (TYPE V)

Page 3 of 4

RESULTS:

Wavelength	mW per nm	Wavelength	mW per nm	Wavelength	mW per nm
380	0.183	515	28.112	650	31.874
385	0.209	520	29.613	655	27.953
390	0.231	525	31.141	660	24.322
395	0.290	530	32.760	665	21.065
400	0.444	535	34.739	670	18.139
405	0.828	540	37.319	675	15.553
410	1.708	545	40.297	680	13.291
415	3.425	550	43.730	685	11.324
420	6.557	555	47.895	690	9.638
425	11.484	560	52.415	695	8.191
430	18.534	565	57.250	700	6.924
435	28.914	570	62.071	705	5.864
440	40.460	575	66.363	710	4.976
445	37.314	580	70.172	715	4.236
450	22.765	585	73.059	720	3.592
455	15.404	590	75.055	725	3.051
460	11.372	595	75.519	730	2.585
465	7.895	600	74.731	735	2.190
470	6.747	605	72.661	740	1.853
475	7.170	610	69.665	745	1.584
480	8.518	615	65.890	750	1.352
485	11.074	620	61.062	755	1.167
490	14.550	625	56.002	760	1.004
495	18.090	630	50.578	765	0.868
500	21.394	635	45.472	770	0.746
505	24.157	640	40.640	775	0.641
510	26.315	645	36.150	780	0.097



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CATALOG NUMBER: YBLED26Y - YBLED26Y-ARM (TYPE V)

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CIE Chromaticity Diagram

