

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P629574

Luminaire Tested: GWS-SA1B-830-U-SLL-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P629574
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-37)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA1B-830-U-SLL-W
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2668.4 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

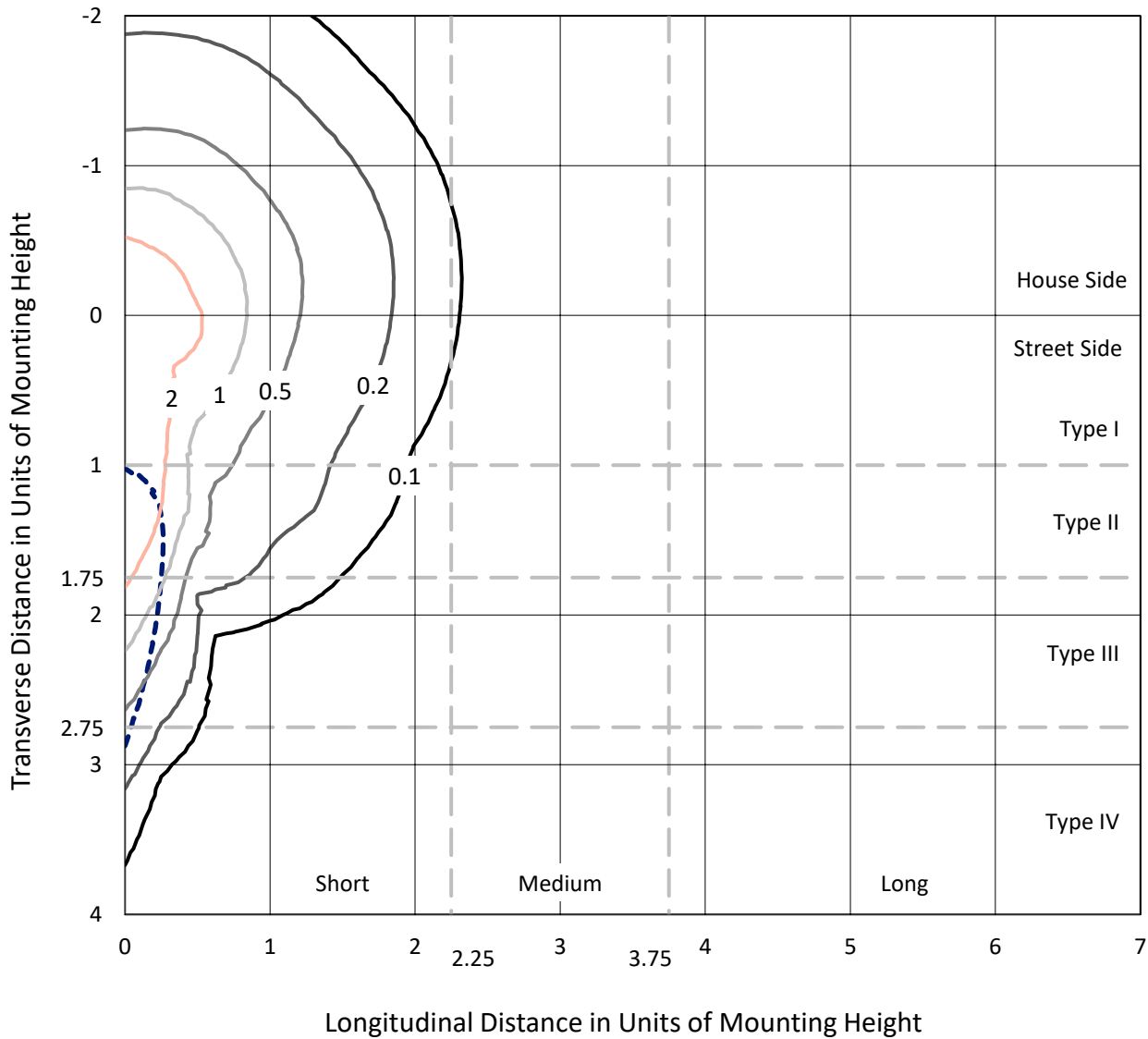
Input Watts (W): 25
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

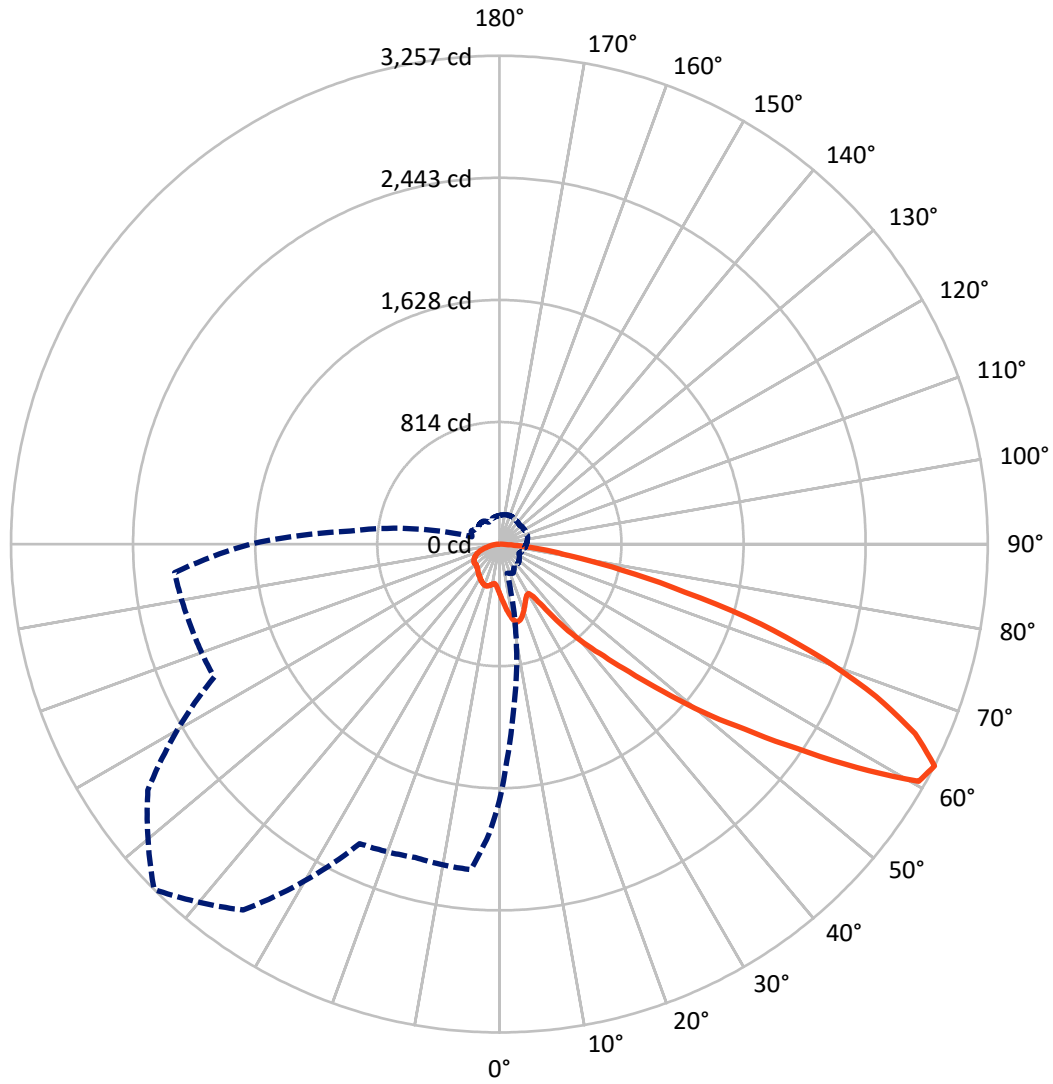
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	638.0	0.0	638.0
	% Fixture	23.9	0.0	23.9
Street Side	Lumens	2030.4	0.0	2030.4
	% Fixture	76.1	0.0	76.1
Total	Lumens	2668.4	0.0	2668.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.8	1.2
10°-20°	106.5	4.0
20°-30°	167.7	6.3
30°-40°	229.8	8.6
40°-50°	358.6	13.4
50°-60°	618.4	23.2
60°-70°	716.6	26.9
70°-80°	378.3	14.2
80°-90°	59.8	2.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2668.4	100.0
0°-180°	2668.4	100.0

Coefficient of Utilization



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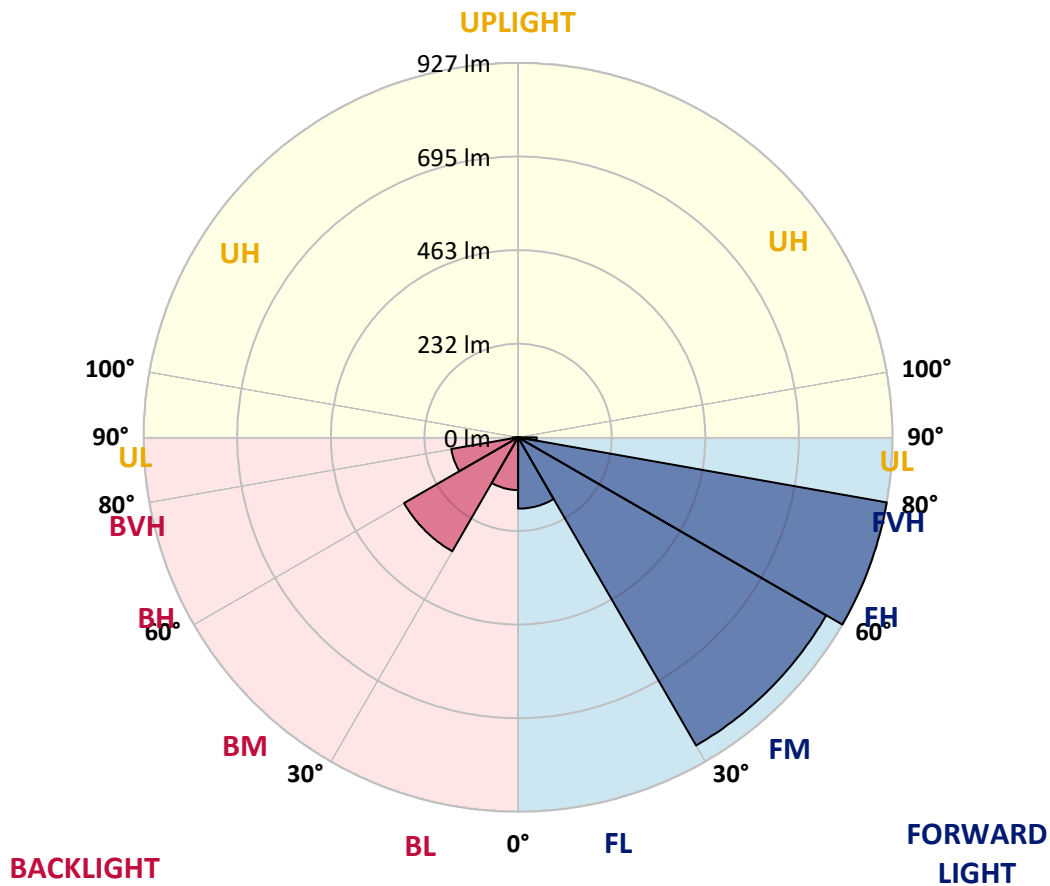
CATALOG NUMBER: GWS-SA1B-830-U-SLL-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	176.5	6.6			
FM (30°-60°)	880.9	33.0			
FH (60°-80°)	926.8	34.7			G1/1800
FVH (80°-90°)	46.1	1.7			G1/100
BL (0°-30°)	130.5	4.9	B1/500		
BM (30°-60°)	325.9	12.2	B1/1000		
BH (60°-80°)	168.0	6.3	B1/500		G1/500
BVH (80°-90°)	13.6	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7
2.5°	361.5	360.0	358.0	351.1	346.8	341.9	336.8	330.9	324.1	319.4	314.7
5°	392.1	389.8	384.9	368.4	357.0	344.5	334.1	322.3	310.7	302.7	294.7
7.5°	421.5	418.6	411.1	385.8	367.2	349.2	333.5	316.4	299.0	287.2	277.8
10°	450.9	445.0	435.4	402.3	377.8	357.0	339.0	318.0	294.9	278.8	268.8
12.5°	473.3	467.8	457.4	417.4	388.4	362.3	342.1	322.7	303.1	286.0	275.7
15°	494.3	487.2	475.4	431.5	397.2	362.1	336.0	319.0	316.2	311.9	298.6
17.5°	509.5	502.9	490.7	442.9	402.1	355.8	319.0	309.0	321.9	334.9	322.3
20°	522.7	515.2	502.7	450.9	403.1	341.7	298.4	298.6	318.8	336.8	333.7
22.5°	533.9	525.6	514.6	459.9	402.7	322.1	280.4	292.7	312.9	327.0	327.4
25°	547.8	540.9	531.7	473.1	402.7	302.1	267.4	285.5	302.9	314.7	314.3
27.5°	564.8	560.1	552.5	493.3	406.4	285.3	260.0	276.4	290.0	300.2	300.0
30°	583.7	579.5	573.7	514.8	412.7	272.9	256.0	264.9	274.9	283.1	283.1
32.5°	603.1	601.5	595.4	531.9	407.8	269.0	252.5	253.5	258.8	265.5	264.9
35°	630.1	628.4	620.7	545.2	386.6	263.5	247.0	241.9	242.5	246.8	248.2
37.5°	669.5	667.0	655.6	560.7	354.5	249.6	238.0	229.6	227.8	229.6	232.3
40°	717.0	713.4	697.8	581.7	317.6	230.8	223.9	217.0	213.9	214.5	217.6
42.5°	776.6	768.9	746.6	604.0	281.1	214.3	208.2	203.9	200.4	200.0	205.9
45°	873.4	852.1	816.8	623.8	250.2	205.5	194.1	191.0	188.2	189.8	196.8
47.5°	1042.4	1003.2	934.4	640.7	231.5	205.7	182.9	179.6	179.4	182.7	190.4
50°	1274.6	1218.1	1112.0	652.1	221.7	208.2	176.1	170.8	174.7	178.0	185.3
52.5°	1497.1	1410.8	1284.4	651.9	217.4	208.6	178.0	162.7	174.7	175.5	182.5
55°	1687.1	1530.8	1331.0	585.0	211.3	207.0	185.1	156.3	172.5	175.5	181.0
57.5°	1838.2	1607.1	1327.5	472.5	229.8	198.0	189.4	154.9	165.9	175.9	182.3
60°	1821.4	1572.2	1242.0	290.0	228.0	182.1	188.8	157.6	154.9	170.4	180.8
62.5°	1710.2	1447.1	1094.8	201.2	214.1	172.9	178.8	162.3	144.7	162.5	173.9
65°	1554.5	1285.7	912.4	154.3	177.4	173.3	161.9	159.0	135.7	149.8	162.1
67.5°	1348.5	1085.4	720.3	122.3	123.7	150.0	147.0	141.2	127.4	138.6	149.6
70°	1013.8	792.1	495.6	98.4	93.7	125.3	132.1	127.0	119.2	122.5	134.1
72.5°	714.4	517.2	271.5	78.0	72.3	96.3	114.7	113.9	105.3	107.8	119.2
75°	530.9	366.0	169.6	61.6	58.8	69.0	96.1	98.6	91.4	94.3	103.1
77.5°	353.3	237.0	94.3	45.7	45.7	50.4	71.6	83.1	77.8	80.0	86.1
80°	194.9	120.6	47.1	30.0	30.8	34.7	52.3	59.8	60.0	65.5	67.2
82.5°	61.6	38.4	21.0	17.6	16.5	19.8	33.7	42.9	40.0	51.0	46.9
85°	14.1	9.0	3.9	3.9	4.3	6.5	12.9	22.9	29.2	35.1	25.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	9.0	13.3	11.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7
2.5°	311.9	307.8	306.6	303.1	302.7	299.4	298.2	298.2	299.6	299.6	301.1
5°	291.5	286.4	283.5	279.4	278.4	276.0	274.3	274.5	276.4	277.6	280.0
7.5°	273.5	270.0	268.0	266.2	265.7	265.3	263.5	263.3	263.9	265.7	267.6
10°	266.0	263.5	264.1	265.5	267.8	269.0	267.4	266.6	266.0	267.2	268.8
12.5°	273.3	270.8	272.1	274.5	277.6	278.8	278.2	278.0	278.6	283.3	286.8
15°	289.4	284.7	283.1	284.1	286.6	287.8	287.2	288.0	291.9	304.1	312.9
17.5°	309.4	298.0	291.5	289.6	290.6	291.7	291.7	293.7	300.4	318.4	329.4
20°	320.2	305.3	294.3	289.8	290.2	291.3	291.3	294.1	301.7	320.9	328.0
22.5°	317.4	303.7	290.2	285.3	285.5	286.4	286.4	288.8	295.5	312.5	315.8
25°	306.2	294.1	280.9	276.6	277.0	278.4	278.0	279.4	284.5	298.4	300.2
27.5°	292.7	282.1	269.0	265.7	267.6	270.4	268.0	268.2	272.9	284.5	284.7
30°	278.2	269.4	257.8	255.3	258.8	260.2	258.0	258.0	262.7	270.6	270.4
32.5°	262.5	257.0	248.6	245.9	249.8	252.1	249.2	249.6	253.3	258.6	256.6
35°	247.8	244.9	241.1	239.2	241.7	243.7	241.9	242.7	246.2	247.6	244.7
37.5°	233.7	233.3	233.7	233.7	234.3	234.9	233.7	235.7	238.8	237.0	233.7
40°	221.5	223.1	227.0	225.9	225.3	225.9	225.1	228.6	231.7	228.4	224.5
42.5°	211.3	214.3	220.2	220.2	219.0	219.4	219.0	223.3	225.5	221.0	216.8
45°	202.5	207.0	214.5	215.5	213.5	213.5	214.3	219.6	220.4	214.3	209.8
47.5°	196.4	201.9	210.4	212.3	209.2	209.0	211.3	217.0	217.0	209.8	204.7
50°	192.1	198.2	208.4	210.8	207.8	207.0	210.6	216.1	214.9	206.4	201.2
52.5°	189.2	195.5	208.2	211.7	209.6	208.8	212.5	216.4	213.3	204.1	198.8
55°	187.4	194.3	208.8	211.7	209.4	208.0	211.7	215.1	213.5	202.9	197.8
57.5°	188.4	195.3	208.0	209.4	206.8	204.3	208.6	213.5	212.9	203.3	198.2
60°	186.8	193.1	203.5	203.9	199.4	195.5	201.9	209.2	209.2	201.9	197.4
62.5°	179.2	185.5	194.7	195.1	190.0	185.7	193.1	201.9	201.7	195.7	191.0
65°	166.8	172.7	183.1	184.1	179.0	174.5	182.1	190.2	190.8	185.5	181.5
67.5°	153.1	158.4	166.1	170.2	165.9	161.2	168.2	175.9	175.7	169.4	165.1
70°	136.8	141.7	148.8	152.3	149.6	145.1	151.4	155.5	153.7	150.6	147.8
72.5°	120.6	125.3	132.1	132.1	129.2	124.9	126.8	134.1	136.3	134.1	132.3
75°	103.7	107.8	112.5	113.5	107.2	99.4	108.0	114.3	117.0	115.9	113.7
77.5°	86.3	89.4	96.3	94.5	82.7	78.6	85.5	94.9	96.7	96.1	93.1
80°	66.5	68.4	75.7	72.0	62.9	60.2	63.3	70.6	71.0	69.0	65.1
82.5°	44.7	47.1	52.0	44.9	44.7	42.3	39.8	40.6	44.3	43.9	41.2
85°	22.9	24.1	28.8	26.9	23.1	20.0	19.0	20.2	18.2	16.5	14.3
87.5°	9.6	10.4	14.3	8.0	2.4	0.0	0.0	1.2	1.8	2.7	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7
2.5°	304.3	306.6	312.1	319.0	325.8	332.7	340.2	344.9	350.7	358.0	358.2
5°	283.1	288.2	296.2	306.8	317.8	330.4	345.1	357.4	372.1	383.7	388.4
7.5°	270.0	277.4	287.4	300.9	315.3	331.1	350.2	370.9	394.9	410.5	419.6
10°	271.3	282.5	292.5	303.9	317.0	333.9	358.6	386.0	415.6	436.0	447.4
12.5°	293.1	304.9	303.1	302.5	311.3	331.9	365.4	401.3	437.4	457.8	471.5
15°	320.7	325.1	307.8	294.7	300.0	324.5	369.0	414.9	455.6	480.5	493.9
17.5°	334.7	325.8	304.7	285.1	283.7	313.3	370.9	428.8	476.0	500.9	515.2
20°	328.2	315.1	297.4	278.8	268.6	298.0	369.8	439.9	494.6	522.3	533.9
22.5°	314.1	302.7	288.8	271.1	256.4	281.3	367.2	450.9	511.1	539.0	549.3
25°	298.8	290.2	278.8	263.3	249.4	266.6	365.4	465.6	530.1	556.8	563.3
27.5°	283.5	277.2	267.8	255.7	247.8	256.4	366.0	484.8	554.6	579.9	577.2
30°	268.4	262.9	256.4	251.1	247.6	253.9	364.3	505.2	581.5	605.0	589.3
32.5°	254.1	249.0	244.9	245.7	247.8	254.9	356.0	523.7	606.2	626.2	602.3
35°	241.9	236.6	236.6	239.4	247.0	251.5	334.3	538.2	633.5	653.6	620.9
37.5°	230.4	225.7	228.8	233.5	240.6	242.1	306.6	552.3	673.3	692.1	649.7
40°	220.4	215.7	221.3	227.2	230.8	230.2	278.4	571.9	720.3	739.7	687.8
42.5°	212.5	208.2	213.1	220.6	221.3	221.9	257.8	590.7	774.8	799.5	753.6
45°	205.9	202.9	205.3	212.9	212.9	222.3	244.9	606.4	856.8	900.5	874.2
47.5°	200.8	199.0	200.2	202.7	206.8	229.6	236.8	618.4	1006.2	1092.0	1065.4
50°	198.0	196.1	197.8	192.7	204.9	233.3	234.1	627.6	1203.2	1337.5	1304.7
52.5°	195.5	194.9	195.9	184.1	209.0	230.8	232.1	615.4	1335.3	1579.2	1611.6
55°	194.7	195.1	190.2	177.8	213.9	222.7	225.9	527.8	1371.2	1787.6	1989.0
57.5°	195.1	193.9	181.5	178.4	214.1	206.4	234.7	376.6	1318.9	1878.2	2358.3
60°	193.7	187.6	170.8	183.9	204.7	187.2	228.4	245.5	1181.2	1808.6	2379.7
62.5°	187.4	178.4	161.7	187.0	188.0	175.7	207.4	189.2	997.5	1659.6	2173.1
65°	178.2	166.1	153.9	180.6	171.0	170.4	155.9	151.7	802.1	1482.2	1977.2
67.5°	163.1	151.0	148.2	166.1	153.9	151.0	125.3	125.7	640.1	1293.2	1780.2
70°	145.9	133.9	136.1	150.2	137.0	125.5	101.4	104.7	485.6	1077.5	1514.7
72.5°	134.7	118.6	118.8	132.3	120.4	101.6	83.5	86.3	308.2	812.1	1204.2
75°	113.7	104.5	100.0	107.2	102.3	79.2	70.2	69.6	182.7	582.1	901.7
77.5°	94.9	87.8	85.5	88.4	76.3	58.6	56.5	55.5	103.5	372.9	590.9
80°	68.8	66.9	66.7	68.2	58.8	43.1	43.1	43.3	55.7	202.5	333.1
82.5°	43.7	47.8	42.3	46.9	40.0	30.6	28.6	32.5	32.0	86.3	140.4
85°	18.2	24.9	23.3	24.7	19.0	16.7	18.0	19.4	18.6	33.3	54.7
87.5°	3.5	4.1	4.5	4.3	4.3	5.3	5.9	7.1	7.1	9.6	16.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7	332.7
2.5°	366.0	371.9	370.7	373.3	369.8	371.1	364.1	362.3	361.1	361.5
5°	403.5	415.6	417.8	422.3	419.2	419.2	407.0	397.8	394.5	392.1
7.5°	441.7	459.0	470.5	471.7	470.1	466.8	449.0	432.5	426.6	421.5
10°	475.6	496.4	509.2	515.4	512.3	507.2	485.2	462.5	455.4	450.9
12.5°	501.5	519.9	528.4	532.5	532.1	530.3	512.3	487.8	480.3	473.3
15°	518.2	527.4	524.1	523.9	526.8	534.1	528.6	509.5	500.7	494.3
17.5°	529.0	520.3	505.8	499.0	505.2	522.5	535.2	524.4	516.4	509.5
20°	532.9	501.7	480.7	468.2	475.4	500.5	531.7	535.2	528.4	522.7
22.5°	528.4	479.0	450.5	435.8	442.7	472.7	521.5	543.9	539.5	533.9
25°	517.4	455.4	421.1	407.8	415.4	446.0	503.3	552.1	552.3	547.8
27.5°	503.7	433.5	400.5	388.0	395.4	423.9	485.6	559.3	566.4	564.8
30°	489.9	420.5	390.7	381.9	387.4	412.7	467.4	566.6	580.9	583.7
32.5°	483.5	426.8	413.7	417.6	410.5	419.2	460.9	577.0	598.4	603.1
35°	491.9	482.9	516.0	531.3	506.0	472.7	469.2	592.7	623.1	630.1
37.5°	532.5	603.1	652.5	706.4	662.5	589.3	510.7	619.5	658.4	669.5
40°	620.9	708.0	797.2	866.8	800.5	701.9	589.5	659.3	707.0	717.0
42.5°	704.2	806.4	929.3	1019.3	933.2	794.0	674.4	726.2	771.1	776.6
45°	785.8	903.0	1089.1	1214.2	1097.3	881.5	761.1	839.3	873.2	873.4
47.5°	881.5	1011.8	1289.5	1467.7	1315.1	978.5	842.6	1018.3	1065.4	1042.4
50°	996.0	1119.9	1495.9	1762.7	1580.6	1097.7	946.0	1236.5	1300.8	1274.6
52.5°	1149.3	1239.1	1723.3	2050.3	1870.0	1233.4	1096.1	1524.7	1545.9	1497.1
55°	1365.1	1411.2	2015.1	2405.4	2193.1	1400.6	1315.5	1886.4	1827.0	1687.1
57.5°	1856.4	1683.5	2389.9	2810.6	2558.7	1704.3	1796.3	2285.2	2073.9	1838.2
60°	2267.4	2014.1	2736.7	3212.6	2872.0	2039.0	2247.8	2354.6	2064.7	1821.4
62.5°	2128.8	2098.4	2861.8	3256.9	2978.9	2203.7	2163.9	2179.7	1930.0	1710.2
65°	1867.8	1935.7	2750.1	3046.9	2860.4	2056.2	1957.4	2018.0	1775.9	1554.5
67.5°	1713.7	1763.7	2551.5	2710.7	2644.8	1896.6	1796.8	1752.9	1536.7	1348.5
70°	1556.1	1597.5	2272.7	2288.9	2308.7	1631.2	1469.2	1338.5	1145.4	1013.8
72.5°	1344.7	1346.9	1920.2	1826.8	1864.3	1276.5	1182.6	1000.7	833.8	714.4
75°	1128.1	1066.5	1520.0	1276.9	1352.2	993.0	982.0	754.2	628.9	530.9
77.5°	860.1	788.1	1110.3	839.7	949.7	661.3	738.3	511.5	442.5	353.3
80°	577.4	532.5	613.5	473.9	621.3	455.8	481.5	289.8	251.3	194.9
82.5°	304.5	260.0	379.2	281.1	374.7	250.4	180.6	89.6	76.3	61.6
85°	118.0	136.5	185.9	100.0	145.3	89.4	52.3	22.2	18.6	14.1
87.5°	22.9	35.3	19.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2408-195-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/07/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: MCGRAW EDISON
 Catalog Number: **GALN-SB1A-830-U-5WQ**
 Description: GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K): 3050
 CIE u': 0.2476
 CIE v': 0.5251
 Duv: 0.0034
 CIE x: 0.4383
 CIE y: 0.4131
 CIE z: 0.1487
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 581
 Purity: 55.55201
 Rf: 81.5
 Rg: 99.2

CRI (Ra):	81.0		
R1:	79.6	R9:	7.1
R2:	85.6	R10:	67.0
R3:	92.0	R11:	82.7
R4:	82.6	R12:	63.2
R5:	78.9	R13:	80.3
R6:	81.7	R14:	95.0
R7:	85.2	R15:	71.7
R8:	62.0		



Test Conditions

Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength



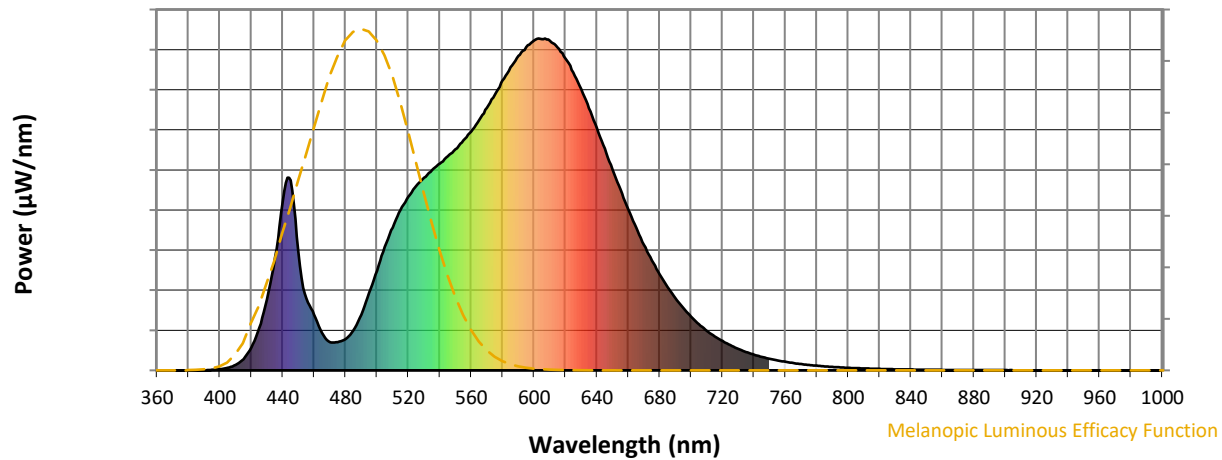
Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

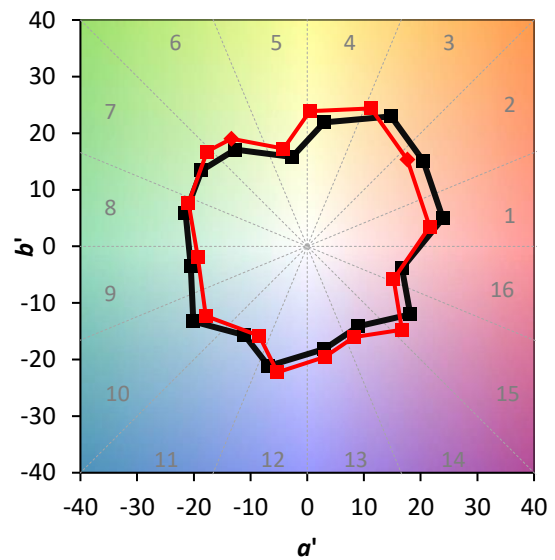
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 81.0$
 $R_9 = 7.1$



Color Vector Graphics



Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)