

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P324329

Luminaire Tested: **GLEON-SA5C-830-U-SLL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324329
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA5C-830-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20826 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

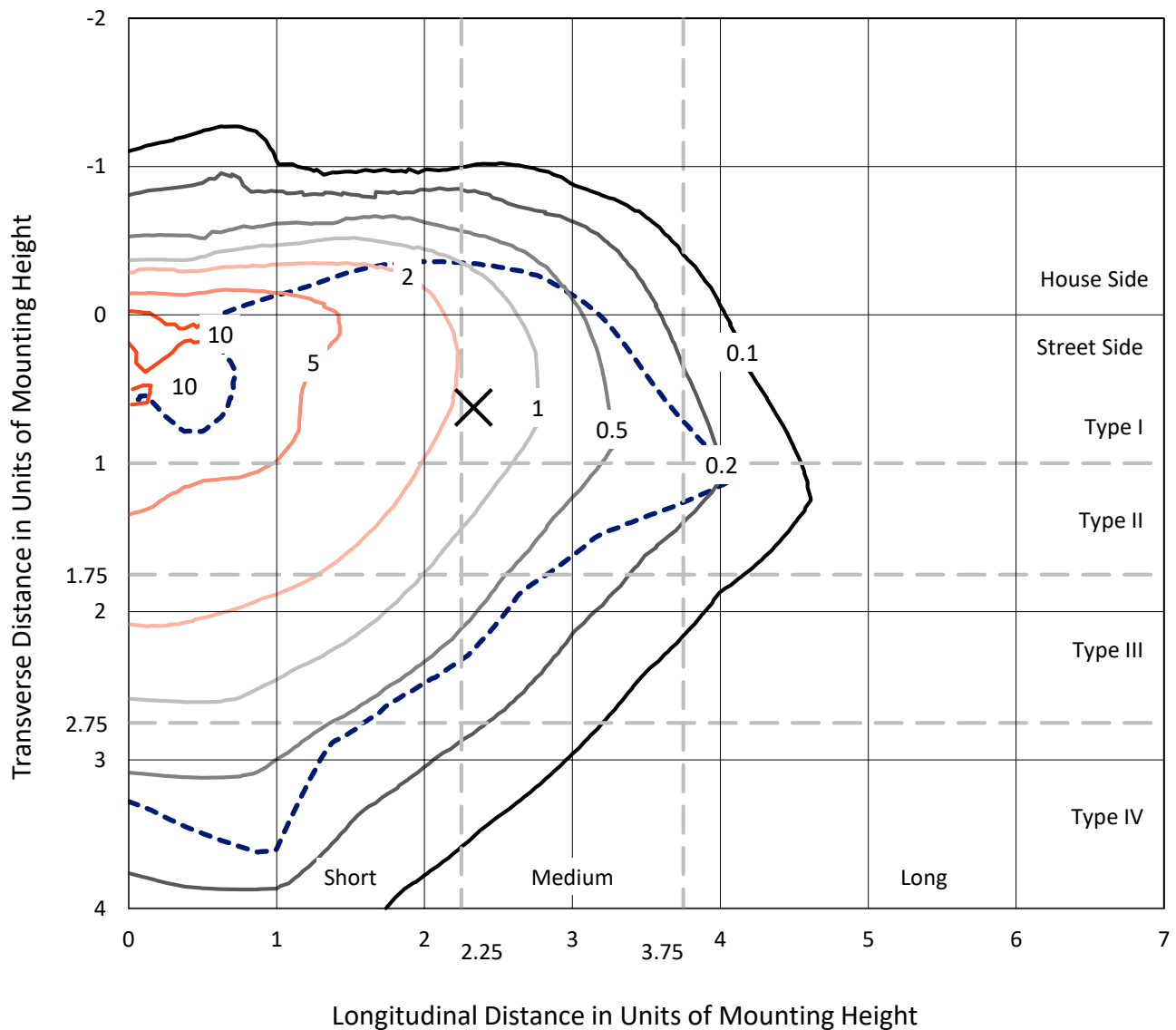
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

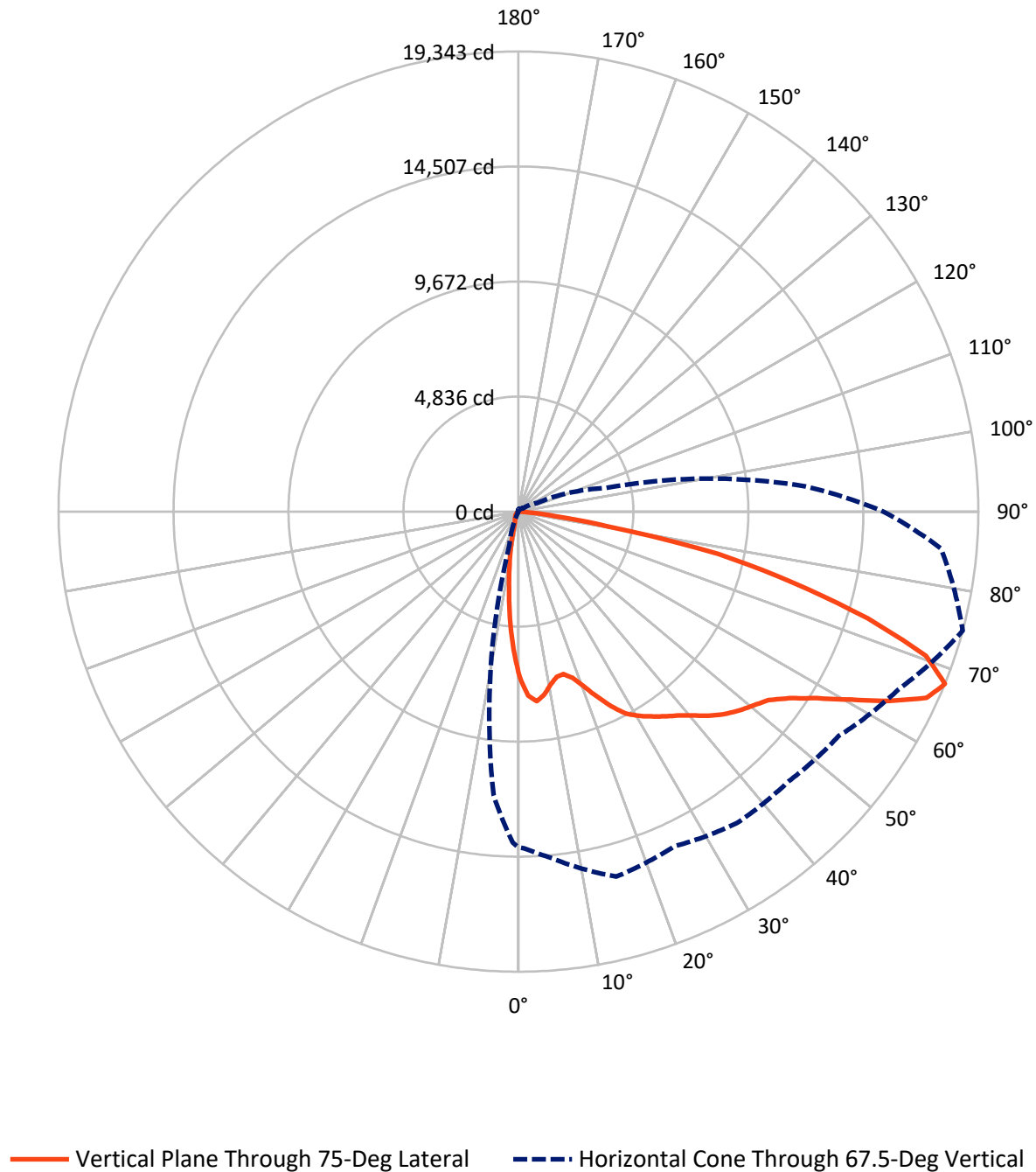
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3125.2	0.0	3125.2
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	17700.8	0.0	17700.8
	% Fixture	85.0	0.0	85.0
Total	Lumens	20826.0	0.0	20826.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	530.0	2.5
10°-20°	1043.5	5.0
20°-30°	1476.3	7.1
30°-40°	2170.6	10.4
40°-50°	3119.8	15.0
50°-60°	4391.9	21.1
60°-70°	5129.4	24.6
70°-80°	2616.8	12.6
80°-90°	347.6	1.7
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°	20826.0	100.0
0°-180°	20826.0	100.0

Coefficient of Utilization



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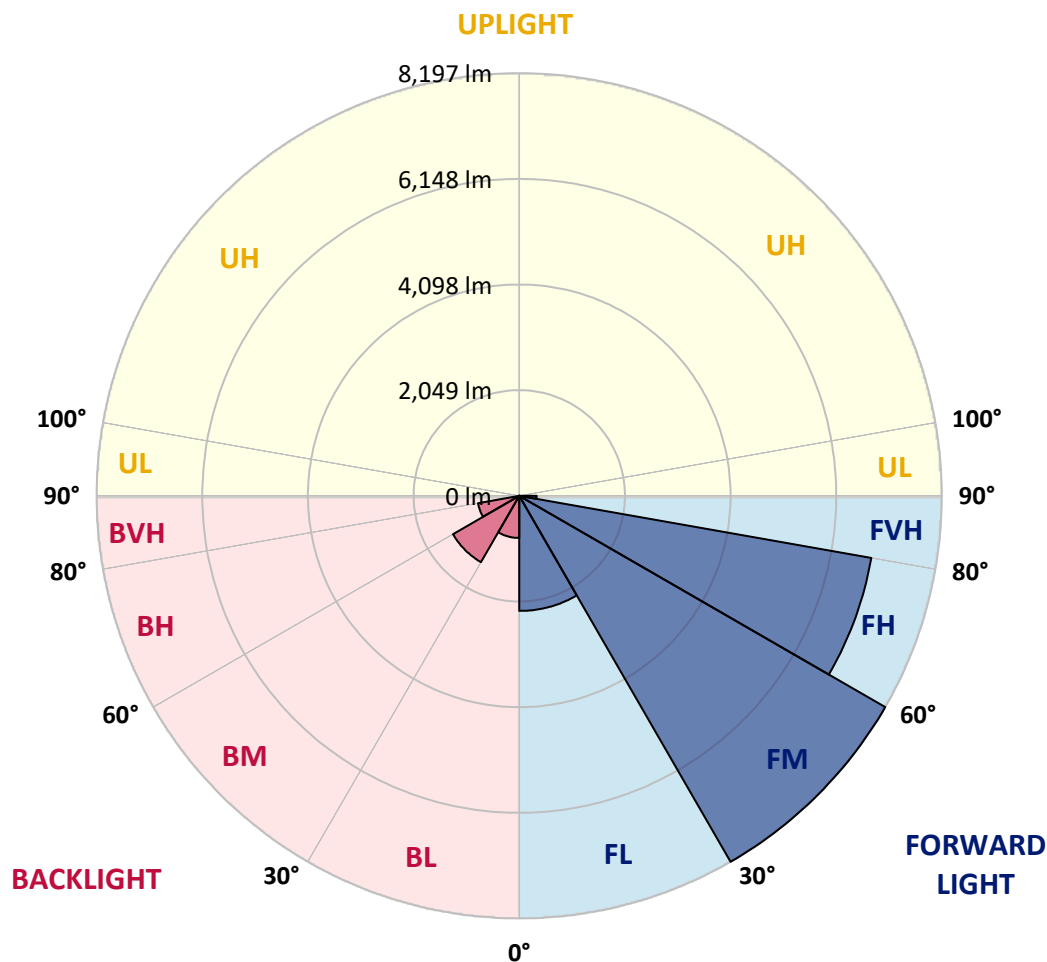
CATALOG NUMBER: GLEON-SA5C-830-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2232.5	10.7			
FM	(30°-60°)	8196.7	39.4			
FH	(60°-80°)	6934.5	33.3			G3/7500
FVH	(80°-90°)	337.1	1.6			G3/500
BL	(0°-30°)	817.3	3.9	B2/1000		
BM	(30°-60°)	1485.6	7.1	B2/2500		
BH	(60°-80°)	811.7	3.9	B2/1000		G2/1000
BVH	(80°-90°)	10.5	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8
2.5°	7573.8	7585.6	7646.8	7788.8	7943.7	7955.6	8060.1	7952.6	7916.1	7742.5	7562.9
5°	7631.0	7676.4	7886.5	8303.8	8665.9	8782.3	8865.2	8654.0	8432.1	8007.8	7555.0
7.5°	7170.3	7246.2	7576.7	8360.0	9007.2	9293.3	9347.6	9017.1	8473.5	7775.0	7094.3
10°	6580.3	6667.1	7065.7	8028.6	8917.5	9407.8	9482.7	9049.6	8268.3	7398.2	6596.1
12.5°	6102.8	6204.4	6611.9	7655.6	8608.7	9151.3	9299.2	8940.1	8090.7	7130.8	6255.7
15°	5882.8	5999.2	6427.4	7414.9	8266.3	8693.5	8815.8	8660.9	7992.1	7088.4	6176.8
17.5°	6009.1	6135.4	6577.3	7435.6	7944.7	8127.2	8225.9	8289.0	7992.1	7343.9	6407.7
20°	6527.0	6663.2	7130.8	7645.8	7678.3	7610.3	7715.8	7937.8	8084.8	7829.3	6962.1
22.5°	7243.3	7403.1	7930.9	8005.9	7548.1	7290.6	7304.4	7652.7	8253.5	8444.9	7731.6
25°	8116.4	8311.7	8848.4	8542.6	7602.4	7100.2	7095.3	7417.9	8418.3	9061.5	8588.9
27.5°	8983.5	9198.6	9670.2	9197.6	7826.3	7065.7	7055.8	7346.9	8579.1	9610.0	9525.2
30°	9710.6	9919.8	10326.2	9672.2	8068.0	7146.6	7099.2	7422.8	8674.8	9966.2	10207.9
32.5°	10302.6	10470.3	10798.8	9998.7	8326.5	7303.5	7200.8	7626.1	8837.5	10267.1	10835.3
35°	10953.7	11130.3	11261.5	10309.5	8616.6	7529.4	7382.4	7948.7	9088.1	10572.9	11522.9
37.5°	11696.6	11872.2	11856.4	10593.6	8984.5	7903.3	7809.6	8459.7	9477.8	10875.8	12290.5
40°	12423.7	12603.2	12475.0	10904.4	9416.6	8519.9	8450.8	9227.2	9999.7	11263.5	13190.2
42.5°	13104.4	13298.7	13024.5	11198.4	9931.6	9297.3	9415.7	10215.8	10652.8	11741.0	13965.6
45°	13652.9	13851.2	13485.2	11484.5	10474.2	10240.4	10596.6	11310.8	11438.1	12144.5	14489.5
47.5°	14051.5	14238.9	13804.8	11770.6	11168.8	11393.7	12014.2	12459.2	12147.4	12494.7	14861.4
50°	14306.0	14452.0	13898.6	12128.7	12080.3	12739.4	13491.1	13708.2	12815.3	12810.4	15313.3
52.5°	14467.8	14533.9	13967.6	12502.6	13031.4	14204.4	14937.4	15005.5	13502.9	13157.7	15922.0
55°	15025.2	15078.5	14456.9	12955.4	13817.7	15487.9	16245.6	16182.4	14281.3	13837.4	16640.2
57.5°	15976.2	16032.5	15468.2	13606.5	14454.0	16281.1	17193.6	17307.1	15193.9	14792.4	17409.7
60°	16453.7	16558.3	16357.0	14431.3	15070.6	16788.2	17839.8	18201.9	16334.4	16051.2	18155.5
62.5°	16020.6	16172.6	16464.6	15345.8	15683.2	17067.4	18041.1	18522.5	17502.4	17518.2	18615.3
65°	15156.4	15277.8	15773.0	15847.0	16038.4	17032.8	17543.9	18074.6	18217.7	18865.8	18590.6
67.5°	14112.6	14158.0	14578.3	15886.5	15523.4	15995.0	16050.2	16442.9	17652.4	19343.3	17843.8
70°	12610.1	12634.8	13001.8	14565.5	13340.2	13443.8	13361.9	13441.8	15176.1	18180.2	15958.5
72.5°	10148.7	10210.8	10732.7	12096.1	9718.5	9419.6	10062.8	10027.3	11687.7	15359.6	11852.4
75°	7472.2	7579.7	8367.9	9743.2	6821.0	6169.9	6639.5	6764.8	8308.7	11881.1	7412.0
77.5°	5231.7	5311.6	6075.2	7162.4	4936.7	4411.9	4242.2	4391.1	5484.2	8594.8	3734.1
80°	3013.9	3043.5	3530.9	4135.6	3326.7	3806.1	3448.0	3550.6	3286.2	3823.9	1606.1
82.5°	1972.1	1977.1	2167.5	2461.4	2071.8	2407.2	1781.7	2278.0	2021.4	1536.1	522.9
85°	1065.5	1071.4	1256.9	1747.2	1173.0	663.0	389.7	800.1	1250.0	352.2	143.1
87.5°	117.4	107.5	378.8	635.3	325.6	60.2	20.7	89.8	200.3	22.7	0.0
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°	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8
2.5°	7471.2	7389.3	7185.1	6969.0	6795.4	6632.6	6468.8	6268.6	6113.7	6082.1	6030.8
5°	7311.3	7051.9	6623.7	6193.6	5847.3	5410.3	5133.0	4917.0	4705.9	4693.0	4650.6
7.5°	6753.0	6411.6	5808.8	5213.9	4726.6	4310.2	3890.0	3608.8	3387.8	3309.9	3263.5
10°	6216.3	5832.5	5079.8	4401.0	3965.9	3598.0	3302.0	3008.0	2741.6	2558.1	2475.3
12.5°	5841.4	5417.2	4587.5	4002.4	3690.7	3341.5	2980.4	2613.4	2306.6	2085.6	1950.4
15°	5696.4	5243.5	4422.7	3844.6	3459.8	3017.9	2556.2	2136.9	1796.5	1596.2	1474.9
17.5°	5869.0	5342.2	4409.9	3652.2	3114.5	2565.0	2055.0	1559.7	1239.1	1087.2	1009.2
20°	6307.0	5655.9	4405.0	3416.4	2704.1	2028.4	1392.0	1026.0	831.7	746.8	710.3
22.5°	6926.6	6056.4	4444.4	3183.6	2277.0	1449.2	960.9	753.7	654.1	608.7	588.0
25°	7723.7	6618.8	4555.9	2972.5	1875.4	1081.3	748.8	631.4	561.3	525.8	511.0
27.5°	8573.1	7266.0	4729.5	2789.0	1548.9	862.2	641.3	540.6	490.3	465.7	451.8
30°	9273.6	8015.7	4905.1	2584.8	1312.1	751.8	587.0	493.3	435.1	419.3	406.5
32.5°	9886.2	8583.0	5029.4	2400.3	1157.2	667.9	530.8	441.0	401.5	370.9	357.1
35°	10520.6	9055.6	5025.5	2271.0	1050.7	604.8	483.4	394.6	347.3	311.8	300.9
37.5°	11207.2	9589.3	4939.7	2160.6	1004.3	554.4	456.8	370.0	322.6	287.1	273.3
40°	12011.3	10149.7	4851.9	2057.0	991.5	514.0	438.0	350.2	299.9	265.4	251.6
42.5°	12794.6	10654.8	4774.9	1980.0	936.2	513.0	421.3	335.4	282.2	248.6	232.8
45°	13421.1	11125.4	4760.1	1933.6	878.0	530.8	412.4	325.6	268.3	234.8	220.0
47.5°	13942.0	11636.4	4854.8	1901.1	822.8	484.4	434.1	318.7	255.5	223.0	206.2
50°	14561.5	12263.8	5077.8	1847.8	764.6	436.1	497.2	320.6	244.7	211.1	193.4
52.5°	15425.7	13132.0	5405.3	1758.0	684.7	391.7	489.3	322.6	232.8	198.3	180.5
55°	16394.5	14216.2	5757.5	1609.1	573.2	333.5	419.3	308.8	210.1	184.5	167.7
57.5°	17412.7	15199.8	5966.7	1431.5	455.8	288.1	335.4	281.2	185.5	165.7	154.9
60°	17572.5	15573.7	5871.0	1213.5	362.1	250.6	248.6	286.1	165.7	146.0	138.1
62.5°	17174.9	15104.1	5408.3	1019.1	302.9	220.0	204.2	249.6	150.0	130.2	122.3
65°	16410.3	13834.4	4658.5	918.5	281.2	188.4	169.7	175.6	131.2	113.5	106.5
67.5°	15346.8	12139.5	3824.9	861.3	278.2	161.8	145.0	133.2	113.5	98.7	92.7
70°	13172.5	10113.2	3051.4	829.7	270.3	136.1	122.3	108.5	94.7	83.9	78.9
72.5°	9694.9	7166.3	2373.6	795.2	272.3	108.5	106.5	89.8	76.0	65.1	63.1
75°	5601.6	4094.2	1556.8	644.2	259.5	83.9	88.8	63.1	53.3	45.4	45.4
77.5°	2985.3	2497.0	592.9	268.3	94.7	53.3	50.3	37.5	33.5	27.6	26.6
80°	1301.3	1099.0	178.6	75.0	52.3	28.6	18.7	16.8	14.8	11.8	10.9
82.5°	460.7	397.6	58.2	36.5	22.7	0.0	0.0	0.0	0.0	0.0	0.0
85°	104.6	75.0	0.0	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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	0.0



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8
2.5°	5926.2	5904.5	5776.3	5781.2	5803.9	5836.4	5759.5	5795.0	5890.7	5982.5	6017.0
5°	4582.5	4587.5	4509.5	4557.9	4601.3	4630.9	4506.6	4508.5	4584.5	4688.1	4742.4
7.5°	3229.0	3221.1	3225.0	3340.5	3422.4	3363.2	3409.5	3248.7	3258.6	3332.6	3277.3
10°	2400.3	2291.8	2230.6	2317.4	2407.2	2374.6	2294.7	2242.4	2278.9	2360.8	2354.9
12.5°	1886.3	1730.4	1638.7	1576.5	1650.5	1589.3	1587.4	1542.0	1492.7	1501.5	1632.7
15°	1418.7	1305.2	1196.7	1097.0	1095.1	1074.4	968.8	850.4	840.5	846.5	914.5
17.5°	975.7	937.2	892.8	807.0	784.3	697.5	594.9	547.5	523.9	534.7	557.4
20°	685.7	670.9	675.8	629.4	596.9	514.0	453.8	435.1	431.1	442.0	452.8
22.5°	568.3	541.6	538.7	517.9	485.4	425.2	392.6	381.8	376.9	386.7	394.6
25°	497.2	470.6	459.7	446.9	412.4	370.9	351.2	341.3	336.4	342.3	347.3
27.5°	438.0	413.4	403.5	394.6	361.1	331.5	315.7	306.8	302.9	304.8	309.8
30°	393.6	371.9	359.1	348.3	319.6	298.9	285.1	276.2	272.3	272.3	277.2
32.5°	347.3	335.4	323.6	309.8	283.1	269.3	255.5	245.7	241.7	242.7	246.6
35°	289.1	285.1	288.1	275.2	252.6	240.7	226.9	216.1	213.1	214.1	218.0
37.5°	256.5	238.7	249.6	242.7	229.9	214.1	196.3	186.5	181.5	184.5	186.5
40°	235.8	214.1	206.2	213.1	211.1	185.5	169.7	159.8	155.9	156.9	158.8
42.5°	218.0	192.4	174.6	173.6	185.5	161.8	145.0	136.1	131.2	131.2	133.2
45°	201.3	173.6	151.9	135.2	155.9	137.1	121.3	113.5	107.5	107.5	108.5
47.5°	188.4	157.8	132.2	110.5	117.4	112.5	99.6	91.7	85.8	85.8	86.8
50°	176.6	142.1	114.4	92.7	87.8	92.7	80.9	72.0	68.1	67.1	69.1
52.5°	163.8	126.3	97.7	78.9	69.1	70.0	63.1	57.2	52.3	52.3	54.3
55°	150.9	113.5	84.8	67.1	57.2	52.3	50.3	46.4	42.4	42.4	44.4
57.5°	138.1	99.6	72.0	55.2	45.4	41.4	41.4	38.5	35.5	35.5	37.5
60°	126.3	85.8	59.2	45.4	35.5	34.5	35.5	32.6	30.6	30.6	32.6
62.5°	112.5	73.0	48.3	37.5	28.6	27.6	30.6	28.6	26.6	26.6	28.6
65°	95.7	62.2	38.5	28.6	21.7	21.7	25.7	23.7	21.7	21.7	23.7
67.5°	80.9	52.3	29.6	20.7	15.8	16.8	21.7	19.7	18.7	18.7	20.7
70°	67.1	40.4	20.7	12.8	8.9	12.8	16.8	16.8	16.8	16.8	18.7
72.5°	50.3	27.6	11.8	4.9	3.9	8.9	13.8	15.8	14.8	14.8	17.8
75°	32.6	15.8	3.9	0.0	0.0	4.9	10.9	12.8	12.8	11.8	14.8
77.5°	18.7	4.9	0.0	0.0	0.0	0.0	6.9	5.9	4.9	3.9	6.9
80°	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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	0.0

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CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8	6986.8
2.5°	6156.1	6272.5	6436.3	6609.9	6877.3	7089.4	7297.5	7476.1	7545.2	7573.8
5°	4872.6	5043.3	5283.0	5590.8	6073.2	6507.3	6947.3	7390.3	7582.6	7631.0
7.5°	3496.3	3714.4	4019.2	4405.0	4970.3	5532.6	6147.2	6797.3	7095.3	7170.3
10°	2587.7	2854.1	3203.3	3609.8	4149.4	4727.6	5397.4	6140.3	6480.7	6580.3
12.5°	1836.0	2196.1	2663.7	3158.0	3625.6	4141.5	4819.3	5638.1	5995.3	6102.8
15°	1078.3	1426.6	1980.0	2642.0	3240.8	3763.7	4452.3	5380.7	5774.3	5882.8
17.5°	618.6	792.2	1210.5	1948.4	2761.4	3485.5	4336.9	5444.8	5908.5	6009.1
20°	472.6	527.8	697.5	1254.9	2201.0	3212.2	4336.9	5807.8	6379.1	6527.0
22.5°	413.4	453.8	522.9	748.8	1619.9	2919.2	4387.2	6332.7	7079.5	7243.3
25°	367.0	403.5	462.7	563.3	1104.9	2571.0	4506.6	6976.9	7904.3	8116.4
27.5°	328.5	363.1	416.3	493.3	755.7	2150.7	4667.4	7732.6	8813.9	8983.5
30°	294.0	326.5	374.9	429.2	583.1	1674.2	4804.5	8444.9	9528.1	9710.6
32.5°	261.4	291.0	334.4	374.9	477.5	1238.1	4819.3	9009.2	10121.0	10302.6
35°	230.9	257.5	297.0	328.5	395.6	977.7	4589.4	9498.5	10714.0	10953.7
37.5°	201.3	226.9	261.4	285.1	348.3	797.1	4238.2	10044.1	11474.6	11696.6
40°	173.6	196.3	231.8	247.6	329.5	612.6	3856.4	10616.3	12220.4	12423.7
42.5°	148.0	169.7	204.2	234.8	289.1	457.8	3444.1	11153.0	12891.3	13104.4
45°	123.3	146.0	180.5	248.6	239.7	342.3	3003.1	11509.1	13421.1	13652.9
47.5°	99.6	125.3	172.6	236.8	191.4	251.6	2653.8	11846.5	13822.6	14051.5
50°	79.9	105.6	194.4	211.1	156.9	192.4	2507.8	12148.4	14086.0	14306.0
52.5°	65.1	88.8	183.5	161.8	131.2	158.8	2586.7	12637.7	14329.7	14467.8
55°	54.3	70.0	110.5	112.5	111.5	135.2	2684.4	13340.2	14960.1	15025.2
57.5°	47.4	56.2	77.0	86.8	93.7	120.4	2686.4	14348.4	15935.8	15976.2
60°	40.4	49.3	64.1	70.0	80.9	107.5	2588.7	14700.6	16319.6	16453.7
62.5°	35.5	43.4	53.3	58.2	68.1	96.7	2359.8	14190.6	15792.7	16020.6
65°	31.6	39.5	44.4	49.3	60.2	86.8	1983.0	13170.5	14918.7	15156.4
67.5°	27.6	34.5	39.5	44.4	54.3	77.0	1460.1	11985.6	13915.3	14112.6
70°	24.7	30.6	35.5	39.5	47.4	65.1	885.9	10170.4	12528.2	12610.1
72.5°	23.7	27.6	32.6	35.5	41.4	57.2	448.9	7474.1	10015.5	10148.7
75°	20.7	24.7	29.6	31.6	36.5	49.3	182.5	4909.1	7258.1	7472.2
77.5°	16.8	22.7	26.6	28.6	31.6	40.4	92.7	3137.2	5093.6	5231.7
80°	5.9	16.8	22.7	23.7	26.6	29.6	61.2	1717.6	2954.7	3013.9
82.5°	0.0	10.9	17.8	16.8	18.7	22.7	39.5	816.9	1950.4	1972.1
85°	0.0	4.9	13.8	10.9	7.9	15.8	13.8	178.6	1023.1	1065.5
87.5°	0.0	0.0	1.0	4.9	3.9	5.9	2.0	1.0	92.7	117.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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



Test Conditions

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

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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

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Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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

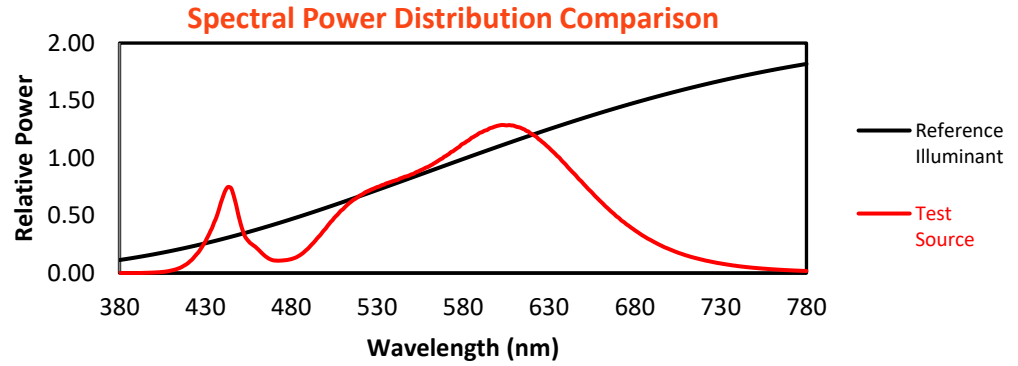
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	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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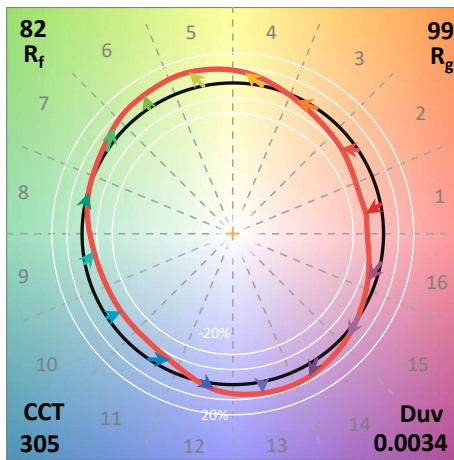
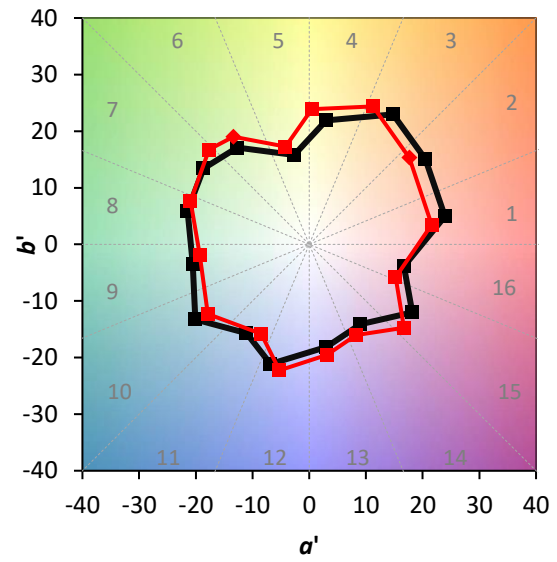
TM-30-18

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)