

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: CORELITE

Report Number: P572175

Luminaire Tested: 24ID-55-L835-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572175
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-8)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24ID-55-L835-DBD
Description: 5500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

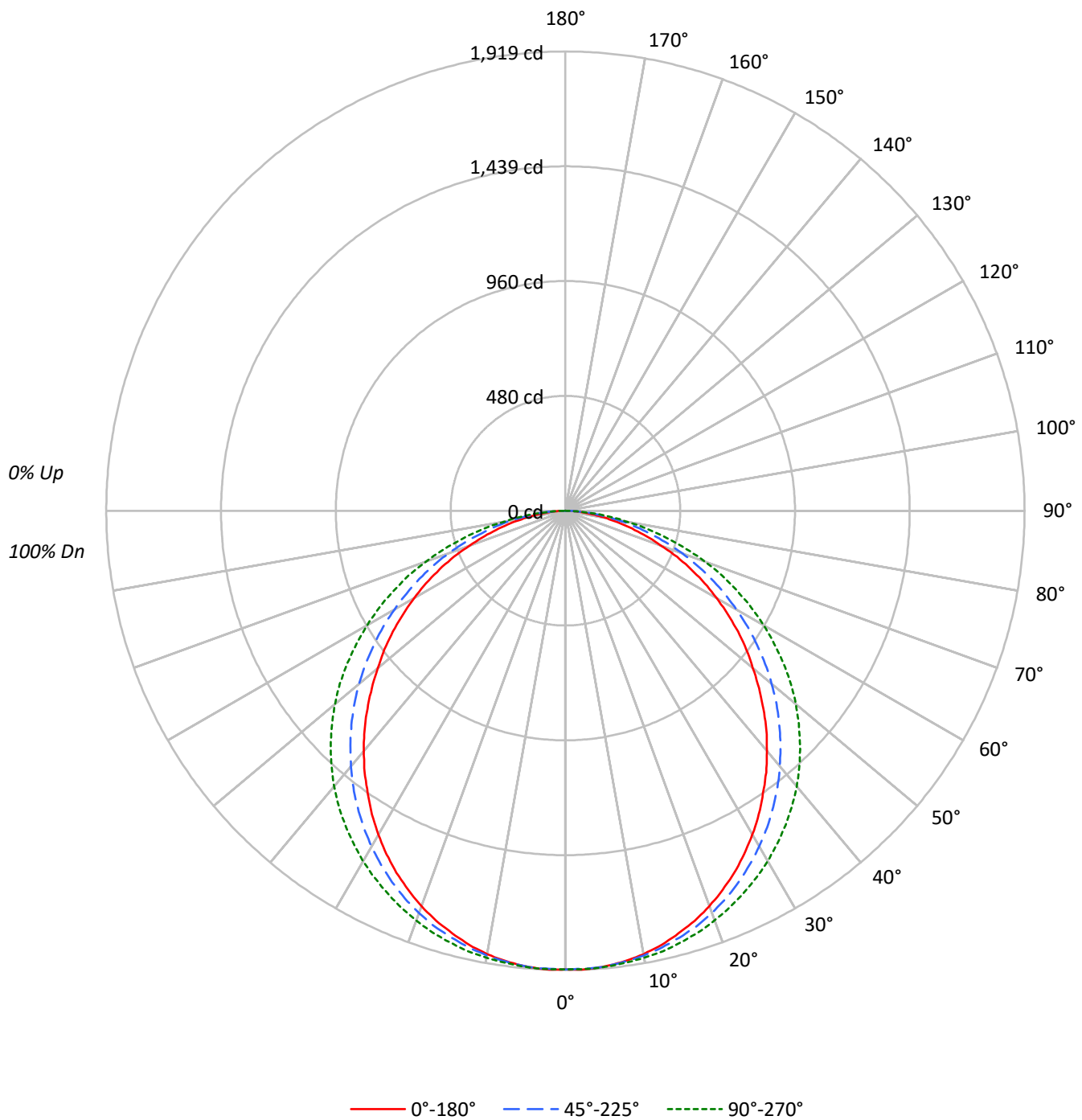
Lumens per Lamp: N/A
Luminaire Lumens: 5469.0 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 50.2
Input Voltage (V):
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

TEST NUMBER: P572175

CATALOG NUMBER: 24ID-55-L835-DBD

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		90
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		79
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		69
4	82	70	61	55	80	69	61	54	66	59	54		64	58	53		62
5	76	63	54	47	74	62	53	47	59	52	46		58	51	46		56
6	70	56	47	41	68	56	47	41	54	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	36		47	41	36		46
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		42
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		39
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2579	2579	2579
5°	2572	2562	2566
10°	2552	2538	2555
15°	2518	2512	2544
20°	2481	2482	2533
25°	2432	2442	2518
30°	2371	2395	2507
35°	2299	2341	2489
40°	2224	2280	2470
45°	2137	2210	2436
50°	2039	2132	2394
55°	1949	2033	2334
60°	1830	1925	2250
65°	1694	1799	2137
70°	1500	1638	1975
75°	1296	1411	1735
80°	1025	1147	1356
85°	707	710	815

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2436 cd/sqm

TEST NUMBER: P572175

CATALOG NUMBER: 24ID-55-L835-DBD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.7	3.3
10°-20°	521.5	9.5
20°-30°	790.4	14.5
30°-40°	950.8	17.4
40°-50°	981.5	17.9
50°-60°	882.0	16.1
60°-70°	671.5	12.3
70°-80°	385.6	7.1
80°-90°	104.0	1.9
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°-30°	1493.6	27.3
0°-40°	2444.3	44.7
0°-60°	4307.9	78.8
0°-90°	5469.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5469.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1917	1917	1917	1917	1917	
5°	1912	1913	1912	1910	1913	182
15°	1828	1837	1846	1858	1867	516
25°	1670	1686	1712	1748	1762	769
35°	1440	1465	1513	1579	1604	901
45°	1170	1197	1264	1352	1387	902
55°	880	903	976	1070	1113	785
65°	580	606	672	750	791	573
75°	288	315	361	413	438	305
85°	68	78	92	98	103	79
90°	0	0	0	0	0	

TEST NUMBER: P572175

CATALOG NUMBER: 24ID-55-L835-DBD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1917.0	1917.0	1917.0	1917.0	1917.0
2.5°	1918.7	1918.7	1915.2	1913.4	1917.0
5°	1911.6	1913.4	1911.6	1909.9	1913.4
7.5°	1899.2	1901.0	1901.0	1902.7	1906.3
10°	1881.4	1885.0	1886.7	1892.1	1897.4
12.5°	1858.3	1861.8	1869.0	1877.8	1885.0
15°	1828.1	1836.9	1845.8	1858.3	1867.2
17.5°	1796.0	1806.7	1820.9	1836.9	1847.6
20°	1758.7	1771.1	1788.9	1810.3	1822.7
22.5°	1716.0	1732.0	1753.4	1780.0	1794.3
25°	1669.8	1685.8	1712.5	1748.0	1762.3
27.5°	1618.2	1636.0	1668.0	1708.9	1728.5
30°	1563.1	1582.7	1620.0	1669.8	1691.1
32.5°	1504.4	1525.7	1568.4	1625.3	1648.4
35°	1440.4	1465.3	1513.3	1579.1	1604.0
37.5°	1378.2	1403.0	1456.4	1527.5	1556.0
40°	1310.6	1337.3	1394.2	1472.4	1504.4
42.5°	1243.0	1266.1	1330.1	1413.7	1447.5
45°	1170.1	1196.8	1264.3	1351.5	1387.0
47.5°	1097.2	1125.6	1196.8	1285.7	1323.0
50°	1022.5	1052.7	1125.6	1216.3	1257.2
52.5°	953.1	978.0	1052.7	1145.2	1187.9
55°	880.2	903.4	976.3	1070.5	1113.2
57.5°	803.8	830.4	903.4	992.3	1034.9
60°	729.1	755.8	825.1	914.0	956.7
62.5°	656.2	681.1	748.6	834.0	876.7
65°	579.7	606.4	672.2	750.4	791.3
67.5°	505.0	533.5	595.7	666.8	709.5
70°	425.0	457.0	517.5	583.3	617.1
72.5°	353.9	384.1	439.2	497.9	529.9
75°	288.1	314.8	361.0	412.6	437.5
77.5°	222.3	250.7	291.6	330.8	350.3
80°	163.6	190.3	222.3	249.0	257.8
82.5°	112.0	131.6	154.7	168.9	181.4
85°	67.6	78.2	92.5	97.8	103.1
87.5°	28.5	32.0	37.3	35.6	37.3
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	13.90	15.54	14.26	15.85	16.17	15.36	17.01	15.73	17.32	17.64
	3H	15.46	16.95	15.84	17.28	17.64	17.26	18.75	17.64	19.08	19.44
	4H	15.98	17.38	16.38	17.73	18.11	17.97	19.37	18.36	19.71	20.09
	6H	16.31	17.61	16.72	17.97	18.37	18.46	19.76	18.87	20.12	20.51
	8H	16.39	17.64	16.82	18.02	18.42	18.60	19.84	19.03	20.23	20.63
	12H	16.44	17.63	16.87	18.01	18.44	18.68	19.87	19.11	20.25	20.68
4H	2H	14.65	16.05	15.05	16.40	16.77	15.82	17.22	16.22	17.57	17.94
	3H	16.42	17.59	16.83	17.99	18.39	17.93	19.11	18.34	19.51	19.91
	4H	17.04	18.11	17.47	18.52	18.95	18.77	19.83	19.20	20.25	20.68
	6H	17.48	18.41	17.93	18.85	19.30	19.39	20.32	19.85	20.76	21.22
	8H	17.59	18.46	18.05	18.90	19.37	19.58	20.45	20.04	20.89	21.36
	12H	17.66	18.44	18.14	18.92	19.38	19.70	20.48	20.18	20.95	21.42
8H	4H	17.42	18.29	17.88	18.74	19.20	18.96	19.83	19.42	20.28	20.74
	6H	17.96	18.69	18.46	19.17	19.65	19.69	20.41	20.18	20.90	21.37
	8H	18.13	18.78	18.64	19.29	19.77	19.93	20.58	20.44	21.09	21.57
	12H	18.24	18.82	18.75	19.31	19.87	20.10	20.68	20.61	21.17	21.73
12H	4H	17.47	18.26	17.95	18.73	19.20	18.97	19.75	19.45	20.23	20.70
	6H	18.03	18.69	18.54	19.19	19.68	19.70	20.35	20.21	20.86	21.35
	8H	18.25	18.83	18.76	19.32	19.88	20.00	20.57	20.50	21.06	21.62