

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: P572232

Luminaire Tested: 24ID-90-L835-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572232
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-7)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24ID-90-L835-DBR
Description: 9000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

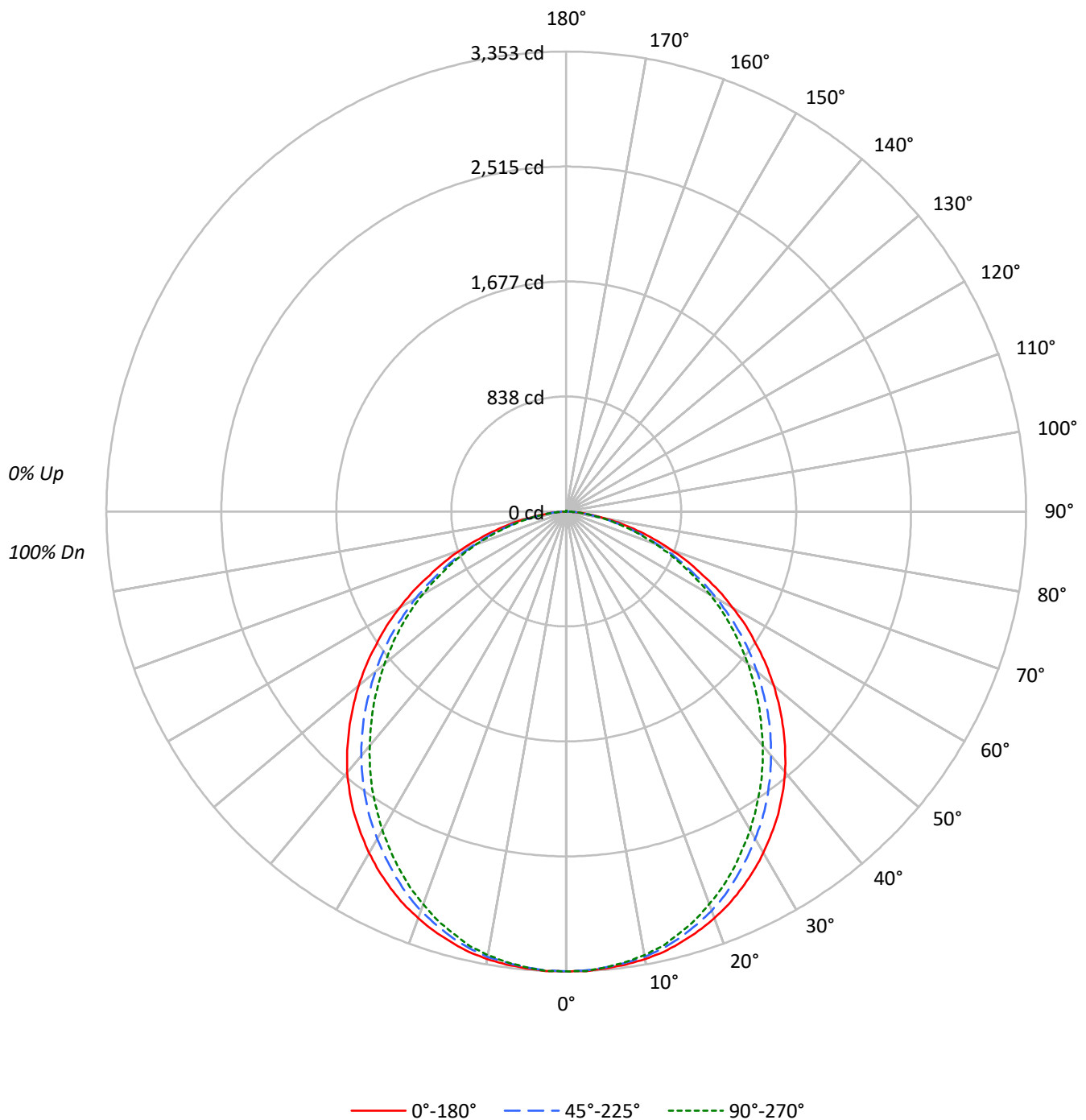
Lumens per Lamp: N/A
Luminaire Lumens: 8812.0 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 87.3
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

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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	105	101	97	107	103	99	95	98	95	92		94	92	90		91
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		80
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	84	72	63	57	81	71	63	56	68	61	56		66	60	55		64
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		57
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		52
7	66	53	44	38	64	52	44	38	50	43	38		49	42	37		48
8	61	48	40	34	60	47	39	34	46	39	34		45	38	33		44
9	57	44	36	31	56	44	36	31	42	35	30		41	35	30		40
10	54	41	33	28	53	40	33	28	39	32	28		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4511	4511	4511
5°	4517	4505	4505
10°	4528	4505	4487
15°	4527	4479	4437
20°	4517	4437	4363
25°	4498	4364	4275
30°	4467	4280	4166
35°	4426	4192	4051
40°	4362	4082	3916
45°	4259	3956	3776
50°	4135	3802	3622
55°	3968	3635	3453
60°	3764	3405	3255
65°	3494	3124	3001
70°	3200	2811	2726
75°	2774	2416	2349
80°	2235	1901	1901
85°	1130	1196	1130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4259 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.2	3.6
10°-20°	906.8	10.3
20°-30°	1357.7	15.4
30°-40°	1604.7	18.2
40°-50°	1615.2	18.3
50°-60°	1397.7	15.9
60°-70°	995.4	11.3
70°-80°	511.1	5.8
80°-90°	105.7	1.2
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°	0.3	0.0
170°-180°	0.0	0.0
0°-30°	2581.7	29.3
0°-40°	4186.4	47.5
0°-60°	7199.3	81.7
0°-90°	8811.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8812.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3353	3353	3353	3353	3353	
5°	3344	3340	3336	3331	3336	318
15°	3250	3237	3215	3189	3185	917
25°	3030	3004	2940	2892	2880	1396
35°	2694	2651	2552	2488	2466	1683
45°	2238	2191	2079	2006	1984	1725
55°	1692	1644	1550	1485	1472	1514
65°	1098	1059	981	947	943	1093
75°	534	508	465	448	452	569
85°	73	73	78	78	73	110
90°	0	0	0	0	0	4
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	4	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3352.9	3352.9	3352.9	3352.9	3352.9
2.5°	3352.9	3348.6	3348.6	3344.3	3352.9
5°	3344.3	3340.0	3335.7	3331.4	3335.7
7.5°	3331.4	3322.8	3318.5	3309.9	3314.2
10°	3314.2	3305.6	3297.0	3284.1	3284.1
12.5°	3288.4	3279.8	3262.5	3245.3	3245.3
15°	3249.6	3236.7	3215.2	3189.4	3185.1
17.5°	3206.6	3189.4	3159.2	3129.1	3124.8
20°	3154.9	3137.7	3099.0	3060.2	3047.3
22.5°	3099.0	3077.5	3025.8	2982.8	2969.9
25°	3030.1	3004.3	2939.7	2892.4	2879.5
27.5°	2956.9	2922.5	2849.3	2797.7	2780.5
30°	2875.2	2840.7	2754.7	2703.0	2681.5
32.5°	2784.8	2746.0	2660.0	2595.4	2573.9
35°	2694.4	2651.4	2552.4	2487.8	2466.3
37.5°	2591.1	2543.8	2440.5	2371.6	2350.1
40°	2483.5	2436.1	2324.2	2255.4	2229.5
42.5°	2363.0	2315.6	2203.7	2130.6	2104.7
45°	2238.2	2190.8	2078.9	2005.7	1984.2
47.5°	2109.0	2053.1	1945.5	1876.6	1855.1
50°	1975.6	1919.6	1816.3	1747.5	1730.3
52.5°	1837.9	1781.9	1682.9	1614.1	1601.1
55°	1691.5	1644.2	1549.5	1484.9	1472.0
57.5°	1553.8	1502.1	1403.2	1355.8	1342.9
60°	1398.8	1355.8	1265.4	1222.4	1209.5
62.5°	1256.8	1213.8	1123.4	1076.0	1071.7
65°	1097.6	1058.8	981.3	946.9	942.6
67.5°	959.8	916.8	852.2	817.8	817.8
70°	813.5	774.7	714.5	693.0	693.0
72.5°	667.1	641.3	589.7	568.1	572.5
75°	533.7	507.9	464.8	447.6	451.9
77.5°	408.9	378.8	352.9	340.0	344.3
80°	288.4	266.9	245.3	241.0	245.3
82.5°	172.2	159.3	154.9	154.9	154.9
85°	73.2	73.2	77.5	77.5	73.2
87.5°	30.1	25.8	25.8	30.1	30.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	4.3	0.0	4.3	4.3	4.3
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	4.3	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	4.3
177.5°	0.0	0.0	4.3	4.3	4.3
180°	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	16.96	18.57	17.33	18.88	19.19	16.20	17.80	16.56	18.11	18.43
	3H	18.59	20.03	18.96	20.36	20.72	17.75	19.19	18.13	19.52	19.88
	4H	19.14	20.50	19.54	20.84	21.22	18.27	19.63	18.67	19.97	20.35
	6H	19.49	20.75	19.90	21.11	21.50	18.60	19.86	19.01	20.22	20.61
	8H	19.57	20.77	19.99	21.16	21.56	18.68	19.88	19.11	20.27	20.67
	12H	19.59	20.74	20.02	21.12	21.55	18.71	19.86	19.14	20.24	20.67
4H	2H	17.43	18.78	17.82	19.13	19.51	16.80	18.16	17.20	18.51	18.88
	3H	19.26	20.39	19.67	20.79	21.19	18.55	19.68	18.96	20.08	20.48
	4H	19.93	20.95	20.36	21.36	21.80	19.17	20.19	19.61	20.61	21.05
	6H	20.39	21.27	20.84	21.72	22.17	19.60	20.49	20.06	20.93	21.39
	8H	20.49	21.32	20.95	21.77	22.23	19.71	20.54	20.17	20.99	21.45
	12H	20.54	21.28	21.02	21.76	22.23	19.77	20.51	20.25	20.99	21.46
8H	4H	20.11	20.95	20.58	21.39	21.86	19.43	20.26	19.89	20.71	21.17
	6H	20.65	21.34	21.14	21.83	22.30	19.94	20.63	20.44	21.12	21.60
	8H	20.80	21.41	21.31	21.92	22.41	20.10	20.71	20.61	21.22	21.71
	12H	20.87	21.42	21.38	21.91	22.47	20.19	20.74	20.70	21.23	21.79
12H	4H	20.12	20.87	20.60	21.34	21.81	19.45	20.20	19.93	20.67	21.14
	6H	20.66	21.28	21.17	21.78	22.27	19.97	20.59	20.48	21.09	21.58
	8H	20.84	21.39	21.35	21.88	22.44	20.17	20.71	20.67	21.20	21.76

END OF REPORT