

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: P572235

Luminaire Tested: 24ID-90-L850-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572235
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-90-L850-DBD
Description: 9000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

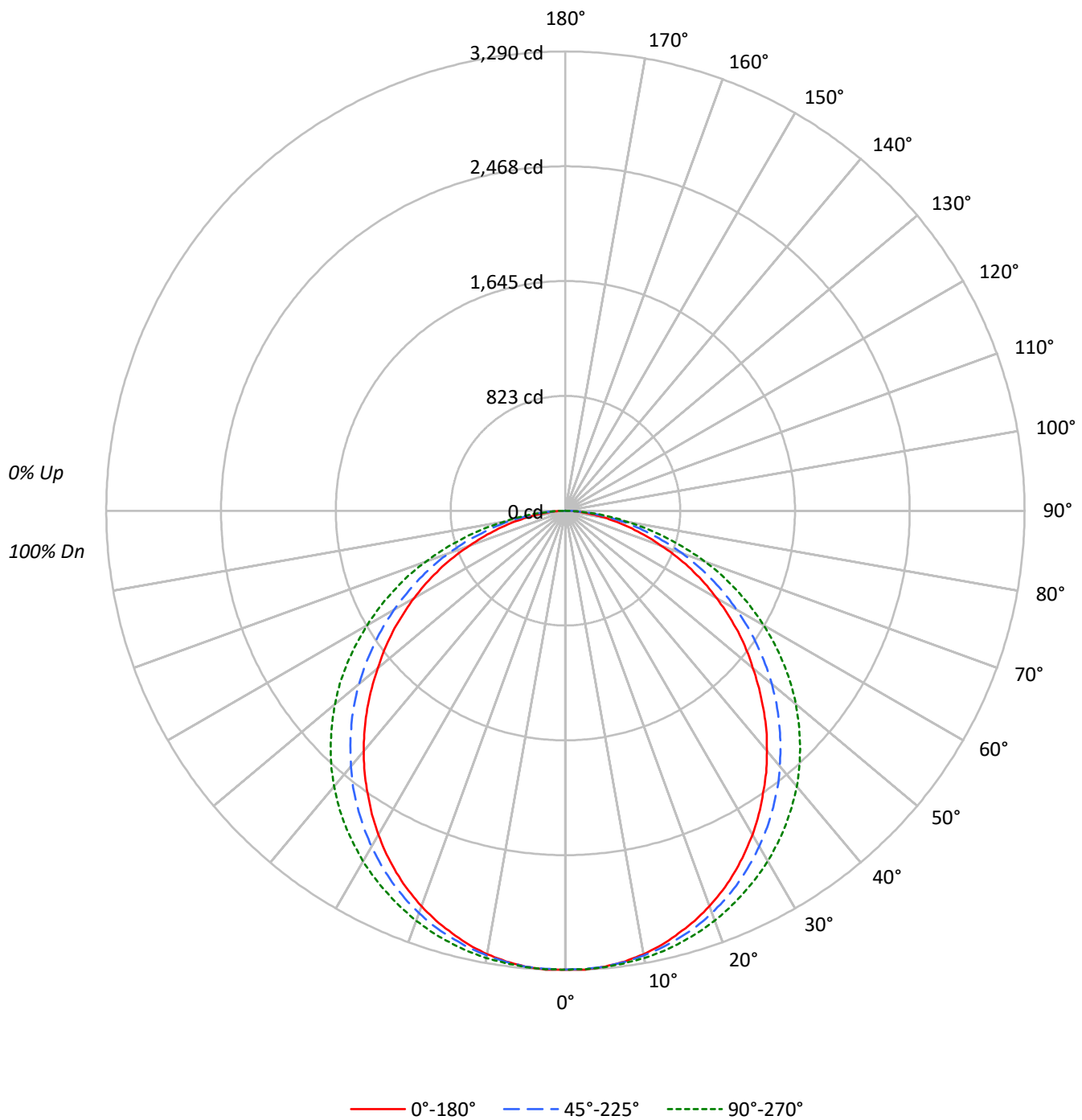
Lumens per Lamp: N/A
Luminaire Lumens: 9378.0 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52
5	76	63	54	47	74	62	53	47	59	52	46	58	51	46	56	50	45
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4423	4423	4423
5°	4411	4393	4399
10°	4375	4352	4381
15°	4318	4307	4363
20°	4253	4255	4343
25°	4170	4187	4318
30°	4066	4106	4299
35°	3942	4014	4269
40°	3814	3909	4235
45°	3665	3790	4177
50°	3496	3655	4105
55°	3342	3487	4002
60°	3138	3302	3858
65°	2905	3085	3665
70°	2573	2808	3387
75°	2222	2420	2974
80°	1758	1967	2326
85°	1212	1218	1399

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4177 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.6	3.3
10°-20°	894.2	9.5
20°-30°	1355.3	14.5
30°-40°	1630.4	17.4
40°-50°	1683.1	17.9
50°-60°	1512.4	16.1
60°-70°	1151.5	12.3
70°-80°	661.2	7.1
80°-90°	178.4	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°	2561.1	27.3
0°-40°	4191.5	44.7
0°-60°	7387.0	78.8
0°-90°	9378.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9378.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3287	3287	3287	3287	3287	
5°	3278	3281	3278	3275	3281	311
15°	3135	3150	3165	3186	3202	884
25°	2863	2891	2936	2997	3022	1318
35°	2470	2513	2595	2708	2750	1546
45°	2006	2052	2168	2318	2378	1547
55°	1509	1549	1674	1836	1909	1347
65°	994	1040	1153	1287	1357	983
75°	494	540	619	707	750	524
85°	116	134	159	168	177	135
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3287.1	3287.1	3287.1	3287.1	3287.1
2.5°	3290.2	3290.2	3284.1	3281.0	3287.1
5°	3278.0	3281.0	3278.0	3274.9	3281.0
7.5°	3256.6	3259.7	3259.7	3262.7	3268.8
10°	3226.1	3232.2	3235.3	3244.4	3253.6
12.5°	3186.5	3192.6	3204.8	3220.0	3232.2
15°	3134.7	3149.9	3165.2	3186.5	3201.8
17.5°	3079.8	3098.1	3122.5	3149.9	3168.2
20°	3015.7	3037.1	3067.6	3104.2	3125.5
22.5°	2942.6	2970.0	3006.6	3052.3	3076.7
25°	2863.3	2890.7	2936.5	2997.4	3021.8
27.5°	2774.9	2805.3	2860.2	2930.4	2963.9
30°	2680.3	2713.9	2777.9	2863.3	2899.9
32.5°	2579.7	2616.3	2689.5	2787.0	2826.7
35°	2469.9	2512.6	2594.9	2707.8	2750.5
37.5°	2363.2	2405.9	2497.4	2619.3	2668.1
40°	2247.3	2293.1	2390.6	2524.8	2579.7
42.5°	2131.5	2171.1	2280.9	2424.2	2482.1
45°	2006.4	2052.2	2168.0	2317.5	2378.4
47.5°	1881.4	1930.2	2052.2	2204.6	2268.7
50°	1753.3	1805.2	1930.2	2085.7	2155.8
52.5°	1634.4	1677.1	1805.2	1963.7	2036.9
55°	1509.4	1549.0	1674.1	1835.7	1908.9
57.5°	1378.3	1424.0	1549.0	1701.5	1774.7
60°	1250.2	1295.9	1414.9	1567.3	1640.5
62.5°	1125.2	1167.9	1283.7	1430.1	1503.3
65°	994.1	1039.8	1152.6	1286.8	1356.9
67.5°	866.0	914.8	1021.5	1143.5	1216.7
70°	728.8	783.7	887.3	1000.2	1058.1
72.5°	606.8	658.6	753.2	853.8	908.7
75°	494.0	539.7	619.0	707.4	750.1
77.5°	381.2	429.9	500.1	567.2	600.7
80°	280.5	326.3	381.2	426.9	442.1
82.5°	192.1	225.6	265.3	289.7	311.0
85°	115.9	134.2	158.6	167.7	176.9
87.5°	48.8	54.9	64.0	61.0	64.0
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	15.77	17.41	16.14	17.73	18.04	17.24	18.88	17.60	19.19	19.51
	3H	17.34	18.82	17.71	19.15	19.51	19.14	20.62	19.51	20.95	21.31
	4H	17.86	19.26	18.25	19.60	19.98	19.84	21.24	20.24	21.59	21.96
	6H	18.19	19.48	18.60	19.85	20.24	20.33	21.63	20.74	22.00	22.39
	8H	18.27	19.51	18.69	19.90	20.30	20.48	21.72	20.90	22.11	22.50
	12H	18.31	19.50	18.74	19.88	20.31	20.56	21.74	20.98	22.13	22.55
4H	2H	16.52	17.92	16.92	18.27	18.65	17.69	19.09	18.09	19.44	19.82
	3H	18.29	19.47	18.70	19.86	20.26	19.81	20.98	20.22	21.38	21.78
	4H	18.92	19.98	19.35	20.39	20.83	20.64	21.71	21.07	22.12	22.55
	6H	19.35	20.28	19.80	20.72	21.17	21.27	22.20	21.72	22.64	23.09
	8H	19.46	20.33	19.92	20.78	21.24	21.45	22.32	21.91	22.77	23.23
	12H	19.53	20.31	20.01	20.79	21.26	21.57	22.35	22.05	22.83	23.30
8H	4H	19.30	20.17	19.76	20.61	21.07	20.84	21.71	21.30	22.15	22.61
	6H	19.84	20.56	20.33	21.05	21.52	21.56	22.29	22.05	22.77	23.25
	8H	20.00	20.65	20.51	21.16	21.64	21.81	22.46	22.32	22.96	23.45
	12H	20.12	20.69	20.62	21.18	21.74	21.98	22.55	22.48	23.04	23.60
12H	4H	19.35	20.13	19.83	20.60	21.07	20.84	21.63	21.32	22.10	22.57
	6H	19.91	20.56	20.42	21.06	21.55	21.58	22.23	22.09	22.73	23.22
	8H	20.13	20.70	20.63	21.19	21.75	21.87	22.44	22.37	22.93	23.49