

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: P572120

Luminaire Tested: 24ID-20-L835-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572120
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-20-L835-DBR
Description: 2000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

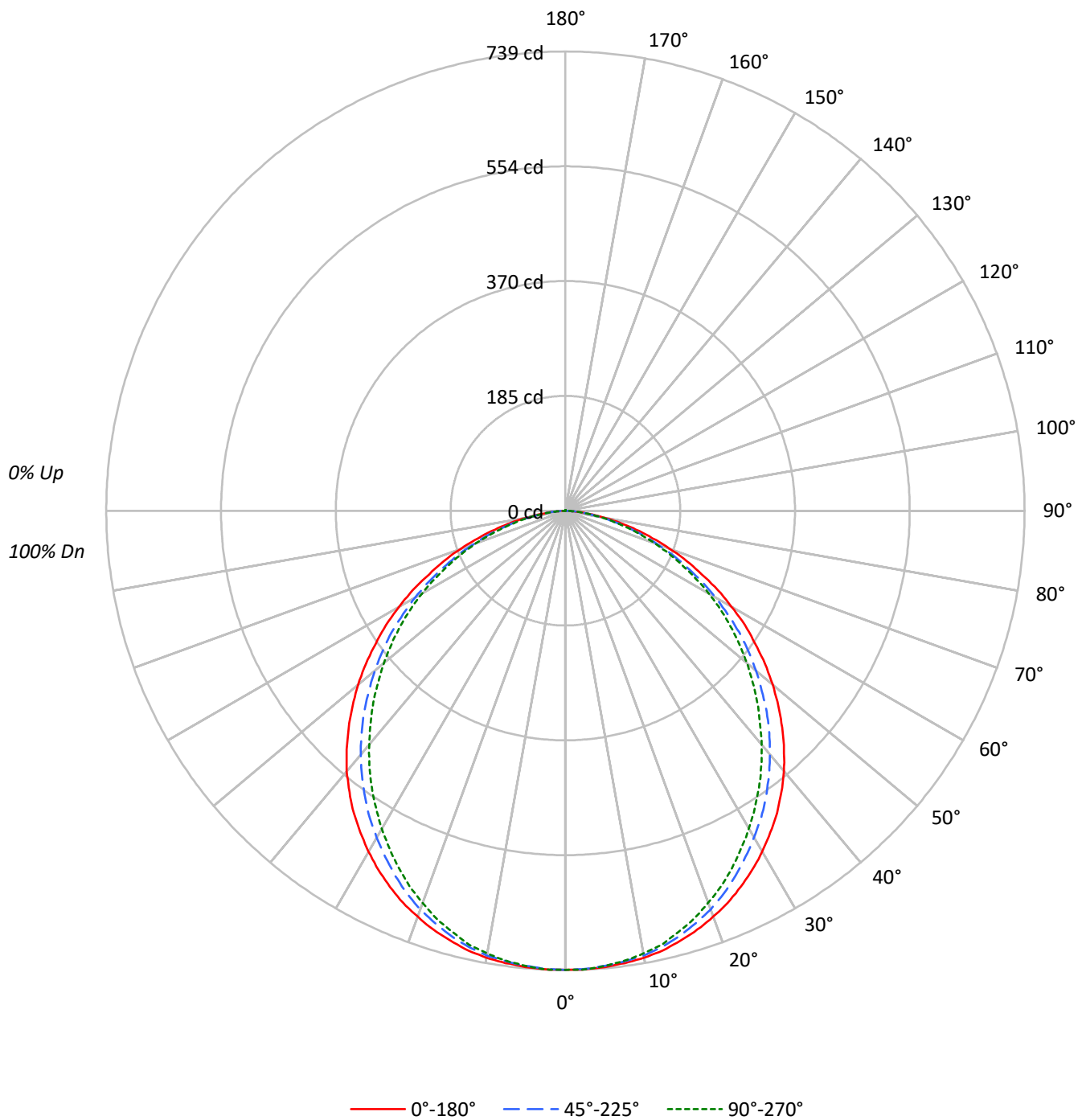
Lumens per Lamp: N/A
Luminaire Lumens: 1942.0 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.9
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°	994	994	994
5°	995	993	993
10°	998	993	989
15°	998	987	978
20°	996	978	962
25°	991	962	942
30°	984	943	918
35°	975	924	893
40°	961	900	863
45°	938	872	832
50°	911	838	798
55°	875	801	761
60°	830	751	717
65°	770	689	661
70°	705	620	601
75°	611	532	518
80°	493	419	419
85°	249	264	249

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 938 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.9	3.6
10°-20°	199.8	10.3
20°-30°	299.2	15.4
30°-40°	353.6	18.2
40°-50°	356.0	18.3
50°-60°	308.0	15.9
60°-70°	219.4	11.3
70°-80°	112.6	5.8
80°-90°	23.3	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°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	569.0	29.3
0°-40°	922.6	47.5
0°-60°	1586.6	81.7
0°-90°	1941.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1942.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	739	739	739	739	739	
5°	737	736	735	734	735	70
15°	716	713	709	703	702	202
25°	668	662	648	637	635	308
35°	594	584	562	548	544	371
45°	493	483	458	442	437	380
55°	373	362	342	327	324	334
65°	242	233	216	209	208	241
75°	118	112	102	99	100	125
85°	16	16	17	17	16	24
90°	0	0	0	0	0	1
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	1	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	738.9	738.9	738.9	738.9	738.9
2.5°	738.9	738.0	738.0	737.0	738.9
5°	737.0	736.1	735.1	734.2	735.1
7.5°	734.2	732.3	731.3	729.4	730.4
10°	730.4	728.5	726.6	723.7	723.7
12.5°	724.7	722.8	719.0	715.2	715.2
15°	716.2	713.3	708.6	702.9	701.9
17.5°	706.7	702.9	696.2	689.6	688.6
20°	695.3	691.5	683.0	674.4	671.6
22.5°	683.0	678.2	666.8	657.3	654.5
25°	667.8	662.1	647.9	637.4	634.6
27.5°	651.7	644.1	627.9	616.6	612.8
30°	633.6	626.0	607.1	595.7	590.9
32.5°	613.7	605.2	586.2	572.0	567.2
35°	593.8	584.3	562.5	548.3	543.5
37.5°	571.0	560.6	537.8	522.7	517.9
40°	547.3	536.9	512.2	497.0	491.4
42.5°	520.8	510.3	485.7	469.5	463.8
45°	493.2	482.8	458.2	442.0	437.3
47.5°	464.8	452.5	428.7	413.6	408.8
50°	435.4	423.1	400.3	385.1	381.3
52.5°	405.0	392.7	370.9	355.7	352.9
55°	372.8	362.3	341.5	327.3	324.4
57.5°	342.4	331.0	309.2	298.8	295.9
60°	308.3	298.8	278.9	269.4	266.5
62.5°	277.0	267.5	247.6	237.1	236.2
65°	241.9	233.3	216.3	208.7	207.7
67.5°	211.5	202.0	187.8	180.2	180.2
70°	179.3	170.7	157.5	152.7	152.7
72.5°	147.0	141.3	130.0	125.2	126.2
75°	117.6	111.9	102.4	98.6	99.6
77.5°	90.1	83.5	77.8	74.9	75.9
80°	63.6	58.8	54.1	53.1	54.1
82.5°	37.9	35.1	34.1	34.1	34.1
85°	16.1	16.1	17.1	17.1	16.1
87.5°	6.6	5.7	5.7	6.6	6.6
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°	0.9	0.0	0.9	0.9	0.9
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.9	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	0.9
177.5°	0.0	0.0	0.9	0.9	0.9
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	11.71	13.31	12.07	13.62	13.94	10.94	12.54	11.31	12.86	13.17
	3H	13.33	14.78	13.71	15.10	15.46	12.49	13.94	12.87	14.26	14.62
	4H	13.88	15.24	14.28	15.59	15.97	13.01	14.37	13.41	14.72	15.10
	6H	14.24	15.49	14.65	15.86	16.25	13.35	14.60	13.76	14.97	15.36
	8H	14.31	15.51	14.74	15.90	16.30	13.43	14.63	13.85	15.01	15.41
	12H	14.34	15.48	14.77	15.87	16.29	13.46	14.60	13.89	14.99	15.42
4H	2H	12.17	13.53	12.57	13.88	14.25	11.55	12.91	11.95	13.25	13.63
	3H	14.00	15.14	14.41	15.53	15.93	13.30	14.43	13.71	14.83	15.23
	4H	14.67	15.69	15.10	16.11	16.54	13.92	14.94	14.35	15.35	15.79
	6H	15.13	16.02	15.59	16.46	16.92	14.35	15.24	14.80	15.68	16.14
	8H	15.24	16.07	15.70	16.51	16.98	14.46	15.29	14.92	15.73	16.20
	12H	15.28	16.03	15.76	16.50	16.97	14.51	15.26	14.99	15.73	16.20
8H	4H	14.86	15.69	15.32	16.13	16.60	14.18	15.01	14.64	15.45	15.92
	6H	15.40	16.08	15.89	16.57	17.05	14.69	15.38	15.18	15.87	16.34
	8H	15.54	16.16	16.05	16.67	17.15	14.84	15.46	15.35	15.97	16.45
	12H	15.62	16.16	16.13	16.65	17.22	14.94	15.48	15.44	15.97	16.53
12H	4H	14.87	15.61	15.35	16.09	16.56	14.20	14.94	14.68	15.42	15.89
	6H	15.40	16.02	15.91	16.53	17.02	14.71	15.33	15.23	15.84	16.33
	8H	15.59	16.13	16.10	16.63	17.19	14.91	15.46	15.42	15.95	16.51

END OF REPORT