

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: P572124

Luminaire Tested: 24ID-20-L850-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572124
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-L850-DBR
Description: 2000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

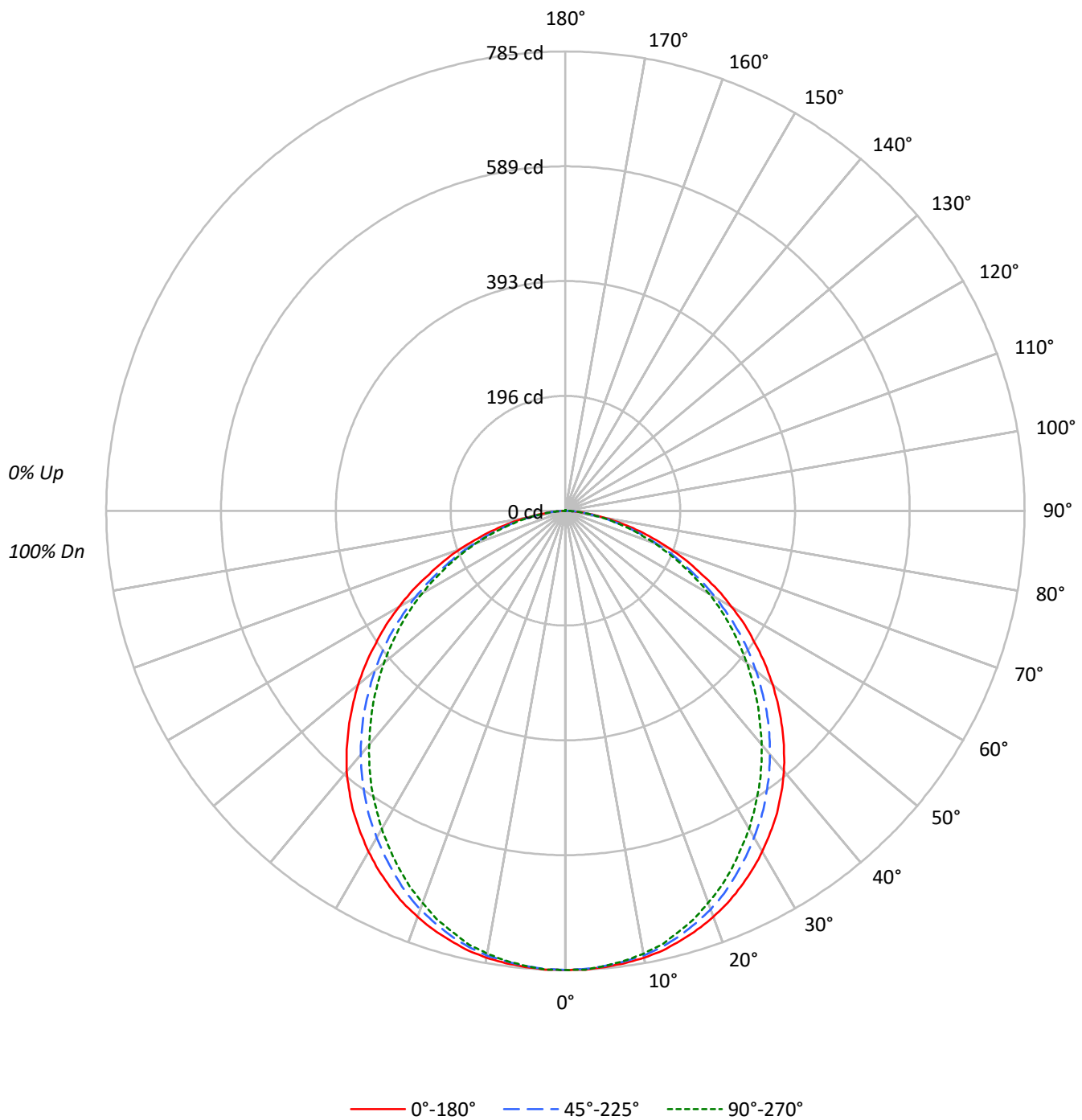
Lumens per Lamp: N/A
Luminaire Lumens: 2063.0 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P572124

CATALOG NUMBER: 24ID-20-L850-DBR

Luminous Intensity Polar Plot



TEST NUMBER: P572124

CATALOG NUMBER: 24ID-20-L850-DBR

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	105	101	97	107	103	99	95	98	95	92	94	92	90	91	89	87
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33
9	57	44	36	31	56	44	36	31	42	35	30	41	35	30	40	34	30
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1056	1056	1056
5°	1057	1055	1055
10°	1060	1055	1050
15°	1060	1048	1039
20°	1058	1039	1021
25°	1053	1022	1001
30°	1046	1002	975
35°	1036	981	948
40°	1021	956	917
45°	997	926	884
50°	968	890	848
55°	929	851	808
60°	881	797	762
65°	818	731	703
70°	749	658	638
75°	649	566	550
80°	523	445	445
85°	264	279	264

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 997 cd/sqm

TEST NUMBER: P572124

CATALOG NUMBER: 24ID-20-L850-DBR

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.3	3.6
10°-20°	212.3	10.3
20°-30°	317.8	15.4
30°-40°	375.7	18.2
40°-50°	378.1	18.3
50°-60°	327.2	15.9
60°-70°	233.1	11.3
70°-80°	119.6	5.8
80°-90°	24.8	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°	604.4	29.3
0°-40°	980.1	47.5
0°-60°	1685.5	81.7
0°-90°	2062.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2063.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	785	785	785	785	785	
5°	783	782	781	780	781	75
15°	761	758	753	747	746	215
25°	709	703	688	677	674	327
35°	631	621	598	582	577	394
45°	524	513	487	470	464	404
55°	396	385	363	348	345	354
65°	257	248	230	222	221	256
75°	125	119	109	105	106	133
85°	17	17	18	18	17	26
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	

TEST NUMBER: P572124

CATALOG NUMBER: 24ID-20-L850-DBR

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	785.0	785.0	785.0	785.0	785.0
2.5°	785.0	784.0	784.0	782.9	785.0
5°	782.9	781.9	780.9	779.9	780.9
7.5°	779.9	777.9	776.9	774.9	775.9
10°	775.9	773.9	771.9	768.8	768.8
12.5°	769.8	767.8	763.8	759.8	759.8
15°	760.8	757.8	752.7	746.7	745.7
17.5°	750.7	746.7	739.6	732.6	731.6
20°	738.6	734.6	725.5	716.4	713.4
22.5°	725.5	720.5	708.4	698.3	695.3
25°	709.4	703.3	688.2	677.1	674.1
27.5°	692.3	684.2	667.1	655.0	650.9
30°	673.1	665.1	644.9	632.8	627.8
32.5°	652.0	642.9	622.7	607.6	602.6
35°	630.8	620.7	597.5	582.4	577.4
37.5°	606.6	595.5	571.3	555.2	550.2
40°	581.4	570.3	544.1	528.0	522.0
42.5°	553.2	542.1	515.9	498.8	492.7
45°	524.0	512.9	486.7	469.6	464.5
47.5°	493.8	480.7	455.5	439.3	434.3
50°	462.5	449.4	425.2	409.1	405.1
52.5°	430.3	417.2	394.0	377.9	374.8
55°	396.0	384.9	362.8	347.6	344.6
57.5°	363.8	351.7	328.5	317.4	314.4
60°	327.5	317.4	296.3	286.2	283.2
62.5°	294.2	284.2	263.0	251.9	250.9
65°	257.0	247.9	229.7	221.7	220.7
67.5°	224.7	214.6	199.5	191.5	191.5
70°	190.4	181.4	167.3	162.2	162.2
72.5°	156.2	150.1	138.0	133.0	134.0
75°	124.9	118.9	108.8	104.8	105.8
77.5°	95.7	88.7	82.6	79.6	80.6
80°	67.5	62.5	57.4	56.4	57.4
82.5°	40.3	37.3	36.3	36.3	36.3
85°	17.1	17.1	18.1	18.1	17.1
87.5°	7.1	6.0	6.0	7.1	7.1
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

TEST NUMBER: P572124

CATALOG NUMBER: 24ID-20-L850-DBR

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°	1.0	0.0	1.0	1.0	1.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	1.0	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	1.0
177.5°	0.0	0.0	1.0	1.0	1.0
180°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P572124

CATALOG NUMBER: 24ID-20-L850-DBR

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	11.92	13.52	12.28	13.84	14.15	11.15	12.75	11.52	13.07	13.38
	3H	13.54	14.99	13.92	15.31	15.67	12.70	14.15	13.08	14.47	14.84
	4H	14.09	15.45	14.49	15.80	16.18	13.23	14.58	13.62	14.93	15.31
	6H	14.45	15.70	14.86	16.07	16.46	13.56	14.81	13.97	15.18	15.57
	8H	14.52	15.72	14.95	16.11	16.51	13.64	14.84	14.06	15.22	15.62
	12H	14.55	15.69	14.98	16.08	16.51	13.67	14.82	14.10	15.20	15.63
4H	2H	12.38	13.74	12.78	14.09	14.46	11.76	13.12	12.16	13.46	13.84
	3H	14.22	15.35	14.62	15.75	16.15	13.51	14.64	13.92	15.04	15.44
	4H	14.88	15.90	15.31	16.32	16.75	14.13	15.15	14.56	15.56	16.00
	6H	15.34	16.23	15.80	16.67	17.13	14.56	15.45	15.01	15.89	16.35
	8H	15.45	16.28	15.91	16.72	17.19	14.67	15.50	15.13	15.94	16.41
	12H	15.49	16.24	15.97	16.71	17.18	14.72	15.47	15.20	15.94	16.41
8H	4H	15.07	15.90	15.53	16.34	16.81	14.39	15.22	14.85	15.66	16.13
	6H	15.61	16.29	16.10	16.78	17.26	14.90	15.59	15.39	16.08	16.55
	8H	15.75	16.37	16.26	16.88	17.36	15.05	15.67	15.56	16.18	16.66
	12H	15.83	16.37	16.34	16.86	17.43	15.15	15.69	15.65	16.18	16.74
12H	4H	15.08	15.82	15.56	16.30	16.77	14.41	15.15	14.89	15.63	16.10
	6H	15.61	16.23	16.13	16.74	17.23	14.92	15.54	15.44	16.05	16.54
	8H	15.80	16.34	16.31	16.84	17.40	15.12	15.67	15.63	16.16	16.72

END OF REPORT