

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: P572123

Luminaire Tested: 24ID-20-L850-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572123
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-20-L850-DBD
Description: 2000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

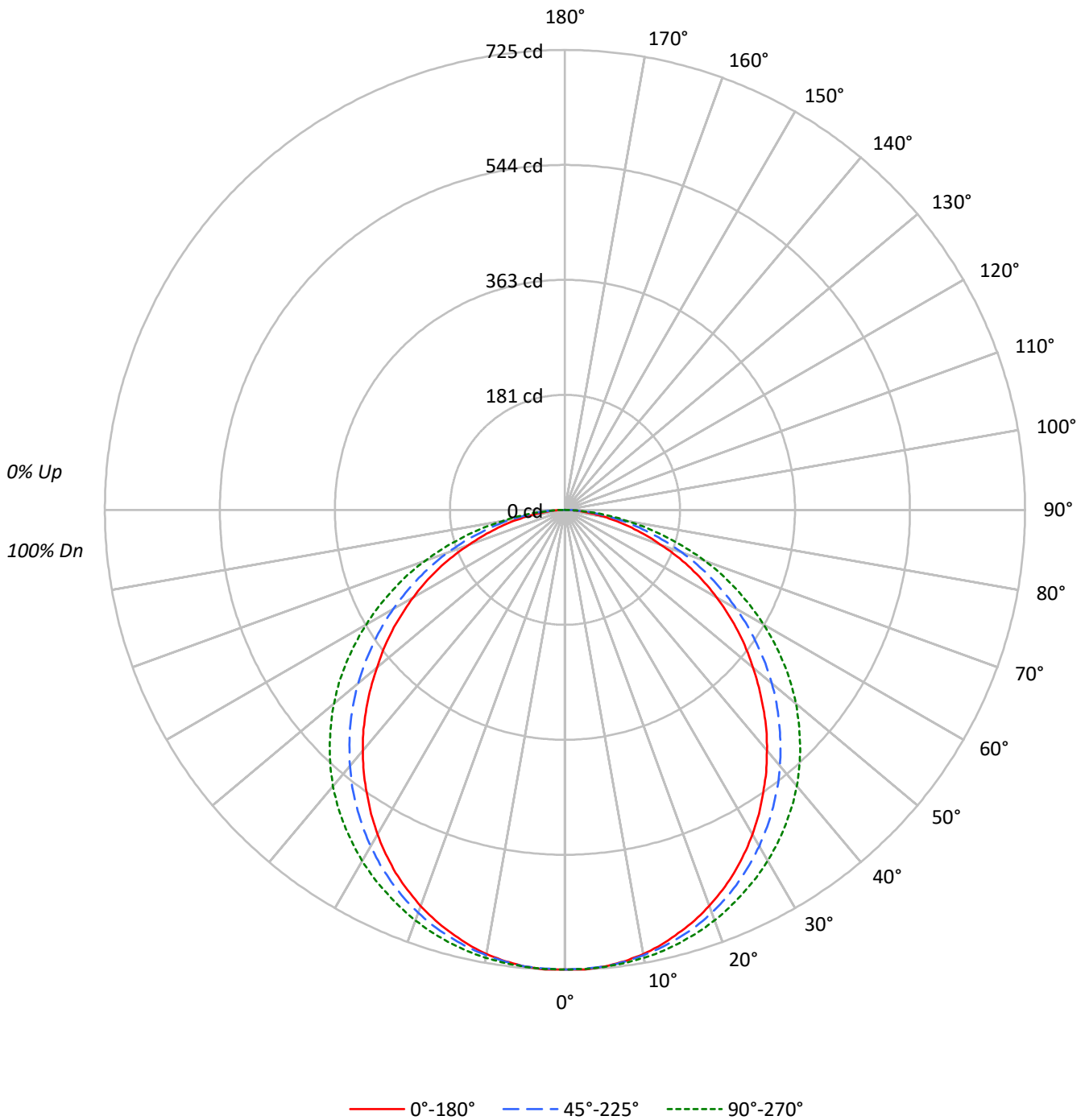
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2067.0 lumens
Efficiency: N/A
Efficacy: 122.3 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): 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: P572123
CATALOG NUMBER: 24ID-20-L850-DBD

Luminous Intensity Polar Plot



TEST NUMBER: P572123

CATALOG NUMBER: 24ID-20-L850-DBD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									20									20
RC	80									70									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100													100															
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84													84															
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70													70															
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58													58															
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52	50													50															
5	76	63	54	47	74	62	53	47	59	52	46	58	51	46	56	50	45	43													43															
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38													38															
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33													33															
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30													30															
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27													27															
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24													24															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	975	975	975
5°	972	968	970
10°	964	959	966
15°	952	949	962
20°	938	938	957
25°	919	923	952
30°	896	905	947
35°	869	885	941
40°	841	862	933
45°	808	835	921
50°	771	806	905
55°	737	769	882
60°	692	728	850
65°	640	680	808
70°	567	619	746
75°	490	533	655
80°	387	434	513
85°	267	268	308

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 921 cd/sqm



TEST NUMBER: P572123

CATALOG NUMBER: 24ID-20-L850-DBD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.7	3.3
10°-20°	197.1	9.5
20°-30°	298.7	14.5
30°-40°	359.3	17.4
40°-50°	371.0	17.9
50°-60°	333.3	16.1
60°-70°	253.8	12.3
70°-80°	145.7	7.1
80°-90°	39.3	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°	564.5	27.3
0°-40°	923.8	44.7
0°-60°	1628.2	78.8
0°-90°	2067.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2067.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	724	724	724	724	724	
5°	722	723	722	722	723	69
15°	691	694	698	702	706	195
25°	631	637	647	661	666	290
35°	544	554	572	597	606	341
45°	442	452	478	511	524	341
55°	333	341	369	405	421	297
65°	219	229	254	284	299	217
75°	109	119	136	156	165	115
85°	26	30	35	37	39	30
90°	0	0	0	0	0	



TEST NUMBER: P572123

CATALOG NUMBER: 24ID-20-L850-DBD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	724.5	724.5	724.5	724.5	724.5
2.5°	725.2	725.2	723.8	723.2	724.5
5°	722.5	723.2	722.5	721.8	723.2
7.5°	717.8	718.5	718.5	719.1	720.5
10°	711.1	712.4	713.1	715.1	717.1
12.5°	702.3	703.7	706.4	709.7	712.4
15°	690.9	694.3	697.6	702.3	705.7
17.5°	678.8	682.8	688.2	694.3	698.3
20°	664.7	669.4	676.1	684.2	688.9
22.5°	648.6	654.6	662.7	672.8	678.1
25°	631.1	637.1	647.2	660.7	666.0
27.5°	611.6	618.3	630.4	645.9	653.3
30°	590.8	598.2	612.3	631.1	639.2
32.5°	568.6	576.7	592.8	614.3	623.0
35°	544.4	553.8	571.9	596.8	606.2
37.5°	520.9	530.3	550.4	577.3	588.1
40°	495.3	505.4	526.9	556.5	568.6
42.5°	469.8	478.5	502.7	534.3	547.1
45°	442.2	452.3	477.9	510.8	524.2
47.5°	414.7	425.4	452.3	485.9	500.0
50°	386.5	397.9	425.4	459.7	475.2
52.5°	360.2	369.7	397.9	432.8	449.0
55°	332.7	341.4	369.0	404.6	420.7
57.5°	303.8	313.9	341.4	375.0	391.2
60°	275.6	285.6	311.9	345.5	361.6
62.5°	248.0	257.4	283.0	315.2	331.3
65°	219.1	229.2	254.1	283.6	299.1
67.5°	190.9	201.6	225.2	252.0	268.2
70°	160.6	172.7	195.6	220.4	233.2
72.5°	133.7	145.2	166.0	188.2	200.3
75°	108.9	119.0	136.4	155.9	165.3
77.5°	84.0	94.8	110.2	125.0	132.4
80°	61.8	71.9	84.0	94.1	97.5
82.5°	42.3	49.7	58.5	63.8	68.6
85°	25.5	29.6	34.9	37.0	39.0
87.5°	10.8	12.1	14.1	13.4	14.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P572123
 CATALOG NUMBER: 24ID-20-L850-DBD

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	10.52	12.16	10.88	12.47	12.79	11.98	13.63	12.35	13.94	14.25
	3H	12.08	13.57	12.46	13.90	14.26	13.88	15.37	14.26	15.70	16.06
	4H	12.60	14.00	13.00	14.35	14.73	14.59	15.99	14.98	16.33	16.71
	6H	12.93	14.23	13.34	14.59	14.98	15.08	16.38	15.49	16.74	17.13
	8H	13.01	14.25	13.44	14.64	15.04	15.22	16.46	15.65	16.85	17.25
	12H	13.06	14.24	13.48	14.63	15.05	15.30	16.49	15.73	16.87	17.30
4H	2H	11.27	12.67	11.67	13.02	13.39	12.44	13.84	12.84	14.19	14.56
	3H	13.04	14.21	13.45	14.61	15.01	14.55	15.73	14.96	16.13	16.53
	4H	13.66	14.73	14.09	15.14	15.57	15.39	16.45	15.82	16.86	17.30
	6H	14.10	15.03	14.55	15.47	15.92	16.01	16.94	16.47	17.38	17.84
	8H	14.21	15.08	14.67	15.52	15.99	16.20	17.07	16.66	17.51	17.98
	12H	14.28	15.06	14.76	15.54	16.00	16.32	17.10	16.80	17.57	18.04
8H	4H	14.04	14.91	14.50	15.36	15.82	15.58	16.45	16.04	16.89	17.36
	6H	14.58	15.31	15.07	15.79	16.27	16.31	17.03	16.80	17.52	17.99
	8H	14.75	15.40	15.26	15.90	16.39	16.55	17.20	17.06	17.71	18.19
	12H	14.86	15.44	15.37	15.93	16.49	16.72	17.30	17.23	17.79	18.35
12H	4H	14.09	14.88	14.57	15.35	15.82	15.59	16.37	16.07	16.85	17.32
	6H	14.65	15.31	15.16	15.81	16.30	16.32	16.97	16.83	17.48	17.96
	8H	14.87	15.45	15.38	15.94	16.50	16.61	17.19	17.12	17.68	18.24