

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: NEO-RAY

Report Number: P1012027

Luminaire Tested: S123DIP-B775D365UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012027
REPORT IS A COMBINATION OF REPORTS P990396 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B775D365UB50-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

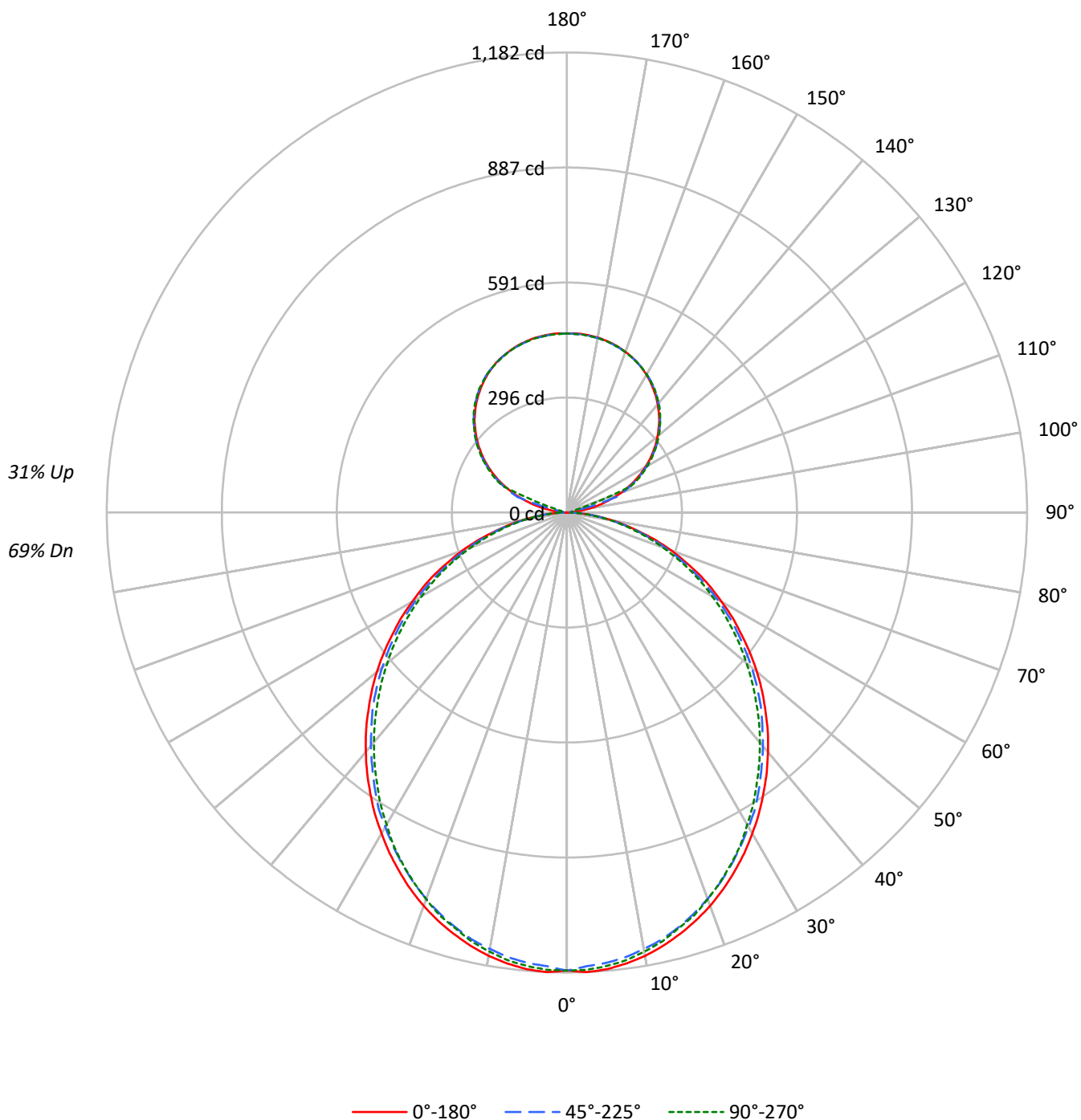
Lumens per Lamp: N/A
Luminaire Lumens: 4467.0 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 45.2
Input Voltage (V):
Input Current (A_{in}): 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: P1012027

CATALOG NUMBER: S123DIP-B775D365UB50-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1012027

CATALOG NUMBER: S123DIP-B775D365UB50-4F0-XX-W2A-F

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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73
1	102	97	93	90	96	92	89	85	82	79	77	73	71	69	65	63	62
2	93	85	79	73	87	80	75	70	72	68	64	64	61	58	57	54	52
3	85	75	67	61	80	71	64	59	63	58	54	57	52	49	50	47	44
4	77	66	58	52	73	63	55	50	56	50	46	51	46	42	45	41	38
5	71	59	51	44	67	56	49	43	51	44	40	45	40	36	41	36	33
6	66	53	45	39	62	51	43	37	46	39	35	41	36	32	37	33	29
7	61	48	40	34	57	46	38	33	41	35	31	37	32	28	34	29	26
8	57	44	36	30	53	42	34	29	38	32	27	34	29	25	31	27	23
9	53	40	32	27	50	38	31	26	35	29	24	32	26	23	29	24	21
10	49	37	29	24	47	35	28	24	32	26	22	29	24	21	26	22	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12668	12668	12668
5°	12699	12231	12212
10°	12587	11818	11695
15°	12412	11387	11133
20°	12211	10909	10574
25°	11951	10404	9978
30°	11668	9882	9350
35°	11370	9349	8726
40°	11058	8790	8112
45°	10715	8244	7471
50°	10367	7636	6828
55°	9920	7003	6176
60°	9459	6305	5482
65°	9026	5548	4759
70°	8405	4710	3915
75°	7505	3730	3040
80°	6482	2622	2149
85°	5052	1409	1077

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10715 cd/sqm

TEST NUMBER: P1012027

CATALOG NUMBER: S123DIP-B775D365UB50-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	2.5
10°-20°	313.3	7.0
20°-30°	462.7	10.4
30°-40°	540.4	12.1
40°-50°	543.3	12.2
50°-60°	477.2	10.7
60°-70°	355.4	8.0
70°-80°	202.3	4.5
80°-90°	58.4	1.3
90°-100°	16.2	0.4
100°-110°	78.5	1.8
110°-120°	192.3	4.3
120°-130°	244.1	5.5
130°-140°	260.8	5.8
140°-150°	243.8	5.5
150°-160°	196.7	4.4
160°-170°	126.9	2.8
170°-180°	43.7	1.0
0°-30°	886.9	19.9
0°-40°	1427.3	32.0
0°-60°	2447.8	54.8
0°-90°	3063.9	68.6
90°-120°	287.0	6.4
90°-150°	1035.7	23.2
90°-180°	1403.0	31.4
0°-180°	4467.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1178	1173	1162	1172	1170	112
15°	1121	1117	1104	1112	1106	316
25°	1018	1012	999	1000	997	469
35°	880	874	861	855	850	551
45°	722	718	704	692	687	557
55°	548	546	533	522	517	490
65°	373	368	358	350	347	368
75°	197	193	190	185	182	211
85°	53	51	51	49	49	56
90°	0	4	8	10	10	5
95°	21	7	11	13	13	25
105°	102	106	75	14	15	108
115°	191	193	196	200	201	189
125°	269	272	274	274	275	241
135°	335	338	339	340	339	258
145°	387	390	390	391	391	242
155°	426	426	426	428	426	196
165°	450	449	448	451	449	127
175°	460	458	459	461	458	44
180°	460	460	460	460	460	

TEST NUMBER: P1012027

CATALOG NUMBER: S123DIP-B775D365UB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1176.9	1176.9	1176.9	1176.9	1176.9
2.5°	1182.0	1177.9	1166.8	1176.9	1175.9
5°	1177.9	1172.9	1161.7	1171.9	1169.8
7.5°	1168.8	1163.8	1152.6	1161.7	1160.7
10°	1156.7	1151.6	1138.5	1147.6	1145.5
12.5°	1140.5	1136.4	1124.3	1130.4	1129.4
15°	1121.3	1117.2	1104.1	1112.2	1106.1
17.5°	1100.0	1095.0	1081.8	1087.9	1085.8
20°	1075.7	1069.7	1056.5	1060.5	1057.5
22.5°	1048.4	1042.3	1029.2	1032.2	1028.2
25°	1018.0	1012.0	998.8	999.8	996.8
27.5°	986.7	980.6	966.4	967.4	964.4
30°	952.3	947.2	933.0	933.0	926.0
32.5°	917.9	910.8	900.7	893.6	890.5
35°	880.4	874.3	861.2	855.1	850.1
37.5°	843.0	834.9	821.7	814.6	811.6
40°	803.5	797.4	783.3	775.2	771.1
42.5°	764.0	757.0	742.8	734.7	730.6
45°	721.5	717.5	704.3	692.2	687.1
47.5°	680.0	674.0	661.8	649.7	645.6
50°	637.5	632.5	619.3	608.2	602.1
52.5°	593.0	590.0	575.8	566.7	560.6
55°	547.5	546.5	533.3	522.2	517.1
57.5°	505.0	500.9	490.8	480.7	474.6
60°	458.4	457.4	445.3	436.2	431.1
62.5°	416.9	413.9	401.8	392.6	389.6
65°	373.4	368.4	358.2	350.1	347.1
67.5°	326.9	322.8	314.7	307.6	303.6
70°	285.4	279.3	273.2	266.1	261.1
72.5°	241.9	237.8	230.7	224.7	222.6
75°	197.3	193.3	190.3	185.2	182.2
77.5°	157.9	155.8	151.8	147.7	147.7
80°	119.4	116.4	114.4	113.3	113.3
82.5°	82.0	82.0	82.0	79.9	78.9
85°	52.6	50.6	50.6	48.6	48.6
87.5°	26.3	23.3	22.3	21.3	21.3
90°	0.3	3.8	8.2	9.6	10.3
92.5°	7.9	5.8	8.9	11.3	11.6
95°	20.9	6.8	10.6	13.0	13.0
97.5°	38.0	28.4	10.9	13.7	14.0
100°	57.8	64.6	11.3	14.0	14.4
102.5°	80.4	84.8	25.3	14.0	14.7
105°	101.9	105.7	74.9	14.4	15.0
107.5°	124.8	127.9	133.0	80.4	35.6
110°	147.7	150.4	154.2	142.9	94.0

TEST NUMBER: P1012027

CATALOG NUMBER: S123DIP-B775D365UB50-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	169.6	172.0	175.8	178.8	178.1
115°	191.1	193.2	196.3	199.7	201.1
117.5°	212.3	214.7	216.4	219.2	219.5
120°	231.8	234.9	235.9	238.7	238.7
122.5°	251.7	254.1	255.4	257.1	257.5
125°	269.4	272.2	273.5	274.2	274.9
127.5°	287.2	290.0	291.7	292.7	292.0
130°	303.6	306.4	307.7	309.1	308.4
132.5°	319.4	322.1	323.1	324.5	323.5
135°	335.4	337.5	338.9	339.9	338.9
137.5°	349.1	351.8	352.5	354.2	353.6
140°	362.8	364.8	365.9	367.2	366.6
142.5°	375.4	377.5	378.5	379.5	378.5
145°	387.1	389.5	390.1	390.8	390.8
147.5°	398.4	400.1	400.7	401.4	399.7
150°	408.6	409.6	410.3	411.0	410.0
152.5°	417.8	418.2	418.5	419.9	418.2
155°	426.4	425.7	426.0	427.8	425.7
157.5°	433.2	433.2	432.9	434.9	432.2
160°	439.4	439.0	438.7	440.7	438.4
162.5°	445.2	444.2	443.8	446.2	444.2
165°	449.6	448.6	448.3	451.0	448.6
167.5°	453.4	452.0	452.0	454.8	452.0
170°	456.5	455.1	455.1	457.8	455.1
172.5°	458.5	456.8	457.2	459.9	456.8
175°	460.2	458.5	458.9	461.3	458.5
177.5°	460.9	459.2	459.6	462.3	458.9
180°	460.2	460.2	460.2	460.2	460.2

(END OF REPORT)