

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: P1011991

Luminaire Tested: S123DIP-B775D365UB27-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011991
REPORT IS A COMBINATION OF REPORTS P990345 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B775D365UB27-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

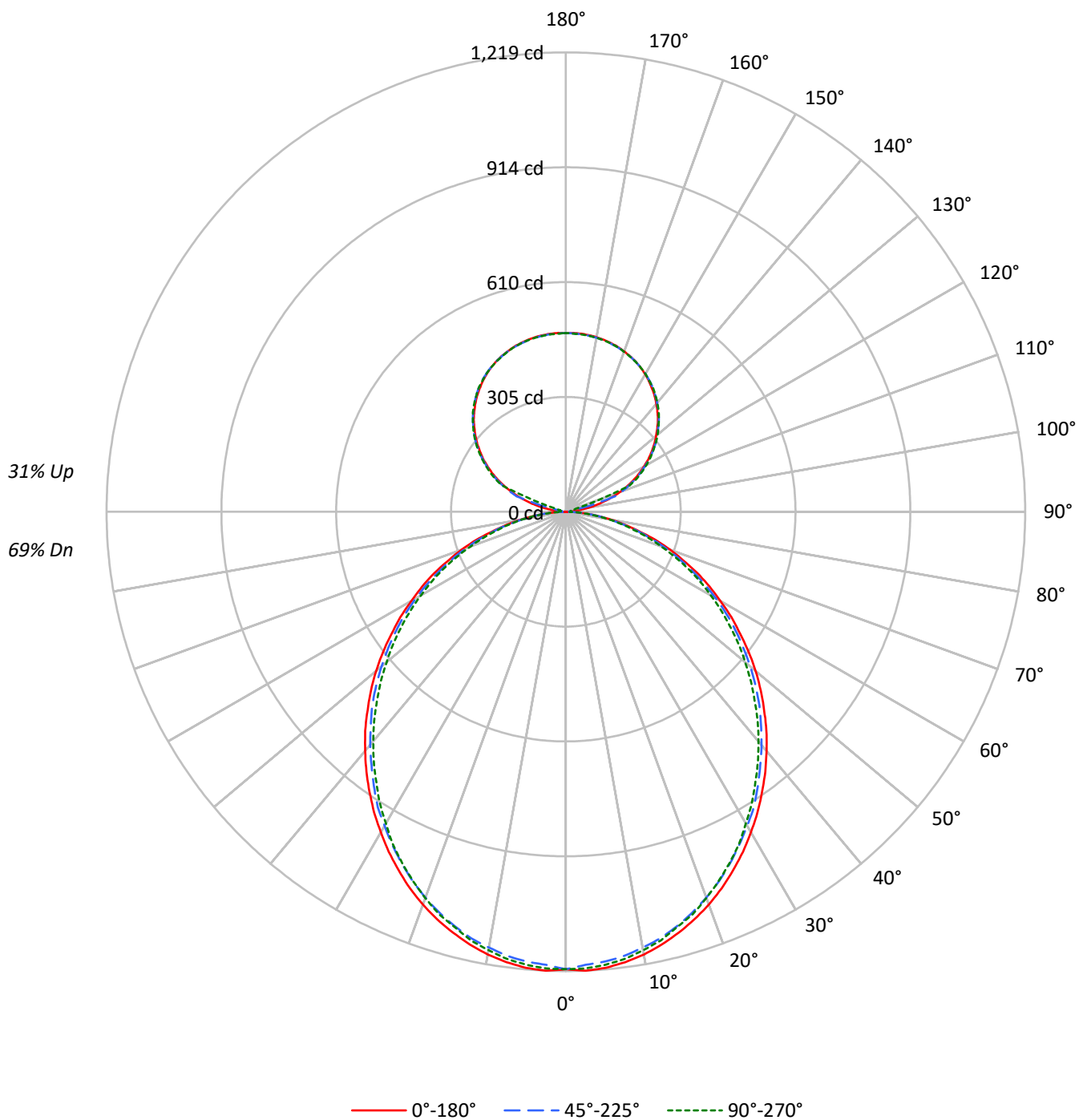
Lumens per Lamp: N/A
Luminaire Lumens: 4606.0 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 45.2
Input Voltage (V):
Input Current (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	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	81	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°	13065	13065	13065
5°	13097	12615	12595
10°	12981	12187	12063
15°	12801	11744	11481
20°	12593	11250	10906
25°	12326	10730	10290
30°	12033	10192	9643
35°	11726	9642	9000
40°	11405	9065	8367
45°	11051	8502	7706
50°	10692	7875	7042
55°	10230	7222	6369
60°	9756	6501	5654
65°	9309	5723	4908
70°	8667	4858	4038
75°	7741	3846	3135
80°	6688	2702	2217
85°	5216	1454	1110

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11051 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	2.5
10°-20°	323.1	7.0
20°-30°	477.2	10.4
30°-40°	557.3	12.1
40°-50°	560.3	12.2
50°-60°	492.2	10.7
60°-70°	366.6	8.0
70°-80°	208.6	4.5
80°-90°	60.3	1.3
90°-100°	16.7	0.4
100°-110°	80.9	1.8
110°-120°	198.2	4.3
120°-130°	251.6	5.5
130°-140°	268.8	5.8
140°-150°	251.3	5.5
150°-160°	202.7	4.4
160°-170°	130.8	2.8
170°-180°	45.1	1.0
0°-30°	914.7	19.9
0°-40°	1472.1	32.0
0°-60°	2524.5	54.8
0°-90°	3160.0	68.6
90°-120°	295.8	6.4
90°-150°	1067.4	23.2
90°-180°	1446.0	31.4
0°-180°	4606.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1214	1214	1214	1214	1214	
5°	1215	1210	1198	1209	1206	115
15°	1156	1152	1139	1147	1141	326
25°	1050	1044	1030	1031	1028	484
35°	908	902	888	882	877	568
45°	744	740	726	714	709	574
55°	565	564	550	538	533	506
65°	385	380	370	361	358	380
75°	204	199	196	191	188	217
85°	54	52	52	50	50	58
90°	0	4	8	10	11	5
95°	22	7	11	13	13	26
105°	105	109	77	15	16	111
115°	197	199	202	206	207	195
125°	278	280	282	283	283	248
135°	346	348	349	350	349	266
145°	399	401	402	403	403	250
155°	439	439	439	441	439	202
165°	463	462	462	465	462	131
175°	474	473	473	475	473	45
180°	474	474	474	474	474	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1213.8	1213.8	1213.8	1213.8	1213.8
2.5°	1219.0	1214.8	1203.4	1213.8	1212.8
5°	1214.8	1209.6	1198.2	1208.6	1206.5
7.5°	1205.5	1200.2	1188.8	1198.2	1197.1
10°	1192.9	1187.7	1174.1	1183.5	1181.5
12.5°	1176.2	1172.1	1159.5	1165.8	1164.8
15°	1156.4	1152.2	1138.7	1147.0	1140.7
17.5°	1134.5	1129.3	1115.7	1122.0	1119.9
20°	1109.4	1103.2	1089.6	1093.8	1090.7
22.5°	1081.3	1075.0	1061.4	1064.6	1060.4
25°	1049.9	1043.7	1030.1	1031.2	1028.0
27.5°	1017.6	1011.3	996.7	997.8	994.6
30°	982.1	976.9	962.3	962.3	955.0
32.5°	946.6	939.3	928.9	921.6	918.4
35°	908.0	901.7	888.2	881.9	876.7
37.5°	869.4	861.0	847.5	840.2	837.0
40°	828.7	822.4	807.8	799.5	795.3
42.5°	788.0	780.7	766.1	757.7	753.5
45°	744.1	740.0	726.4	713.9	708.7
47.5°	701.4	695.1	682.6	670.0	665.9
50°	657.5	652.3	638.7	627.3	621.0
52.5°	611.6	608.5	593.9	584.5	578.2
55°	564.6	563.6	550.0	538.5	533.3
57.5°	520.8	516.6	506.2	495.8	489.5
60°	472.8	471.7	459.2	449.8	444.6
62.5°	430.0	426.9	414.3	404.9	401.8
65°	385.1	379.9	369.5	361.1	358.0
67.5°	337.1	332.9	324.6	317.3	313.1
70°	294.3	288.1	281.8	274.5	269.3
72.5°	249.4	245.3	238.0	231.7	229.6
75°	203.5	199.3	196.2	191.0	187.9
77.5°	162.8	160.7	156.6	152.4	152.4
80°	123.2	120.0	117.9	116.9	116.9
82.5°	84.5	84.5	84.5	82.5	81.4
85°	54.3	52.2	52.2	50.1	50.1
87.5°	27.1	24.0	23.0	21.9	21.9
90°	0.4	3.9	8.5	9.9	10.6
92.5°	8.1	6.0	9.2	11.6	12.0
95°	21.5	7.0	10.9	13.4	13.4
97.5°	39.1	29.2	11.3	14.1	14.4
100°	59.6	66.6	11.6	14.4	14.8
102.5°	82.8	87.4	26.1	14.4	15.2
105°	105.0	108.9	77.2	14.8	15.5
107.5°	128.6	131.8	137.1	82.8	36.7
110°	152.2	155.1	158.9	147.3	96.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.8	177.3	181.1	184.3	183.6
115°	197.0	199.1	202.3	205.8	207.2
117.5°	218.8	221.3	223.1	225.9	226.2
120°	238.9	242.1	243.2	246.0	246.0
122.5°	259.4	261.8	263.2	265.0	265.4
125°	277.7	280.5	281.9	282.6	283.3
127.5°	296.0	298.8	300.6	301.7	301.0
130°	312.9	315.8	317.2	318.6	317.9
132.5°	329.1	332.0	333.0	334.4	333.4
135°	345.7	347.8	349.2	350.3	349.2
137.5°	359.8	362.6	363.3	365.1	364.4
140°	373.9	376.0	377.1	378.5	377.8
142.5°	386.9	389.1	390.1	391.2	390.1
145°	398.9	401.4	402.1	402.8	402.8
147.5°	410.6	412.3	413.0	413.7	412.0
150°	421.1	422.2	422.9	423.6	422.5
152.5°	430.6	431.0	431.3	432.8	431.0
155°	439.4	438.7	439.1	440.9	438.7
157.5°	446.5	446.5	446.1	448.3	445.4
160°	452.8	452.5	452.1	454.2	451.8
162.5°	458.8	457.8	457.4	459.9	457.8
165°	463.4	462.4	462.0	464.8	462.4
167.5°	467.3	465.9	465.9	468.7	465.9
170°	470.5	469.0	469.0	471.9	469.0
172.5°	472.6	470.8	471.2	474.0	470.8
175°	474.3	472.6	472.9	475.4	472.6
177.5°	475.0	473.3	473.6	476.5	472.9
180°	474.3	474.3	474.3	474.3	474.3

(END OF REPORT)