

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: P1012029

Luminaire Tested: S123DIP-B775D365UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012029
REPORT IS A COMBINATION OF REPORTS P990398 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-F4
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

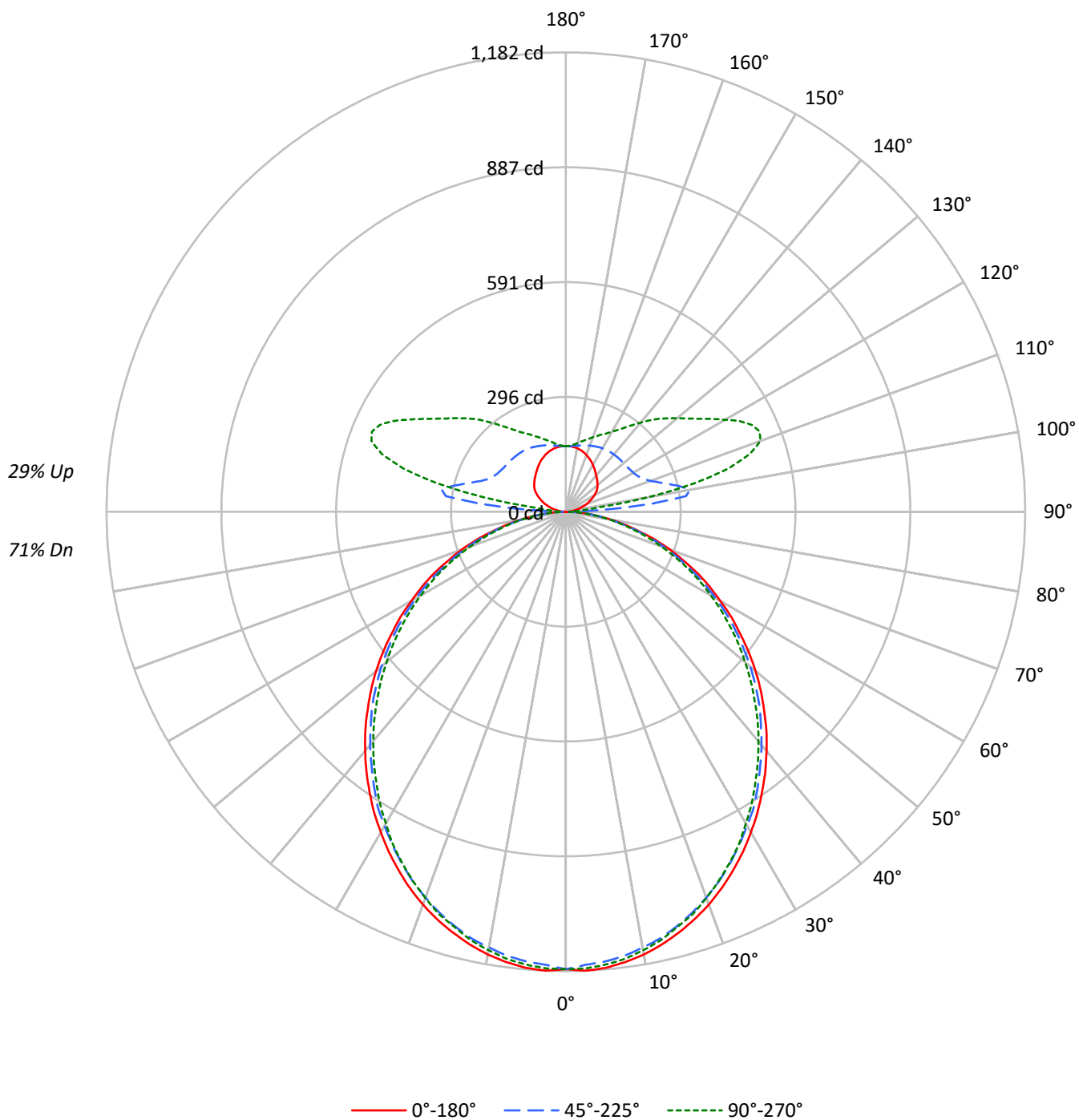
Lumens per Lamp: N/A
Luminaire Lumens: 4337.0 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	106	106	106	106	95	95	95	85	85	85	75	75	75
1	102	98	94	90	97	93	89	86	83	80	78	74	72	70	66	65	63
2	93	85	79	74	88	81	75	71	73	68	64	65	62	59	58	56	53
3	85	75	67	61	80	71	64	59	64	59	54	58	53	50	52	48	45
4	78	67	58	52	73	63	56	50	57	51	46	51	47	43	46	42	39
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	37	34
6	66	53	45	39	62	51	43	38	46	40	35	42	37	32	38	33	30
7	61	48	40	34	58	46	39	33	42	36	31	38	33	29	34	30	27
8	57	44	36	30	54	42	35	29	38	32	28	35	30	26	32	27	24
9	53	40	33	27	50	39	31	26	35	29	25	32	27	23	29	25	22
10	50	37	30	25	47	36	29	24	33	27	22	30	25	21	27	23	20

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	2.6
10°-20°	313.3	7.2
20°-30°	462.7	10.7
30°-40°	540.4	12.5
40°-50°	543.3	12.5
50°-60°	477.2	11.0
60°-70°	355.4	8.2
70°-80°	202.3	4.7
80°-90°	58.5	1.3
90°-100°	95.9	2.2
100°-110°	268.2	6.2
110°-120°	261.5	6.0
120°-130°	208.2	4.8
130°-140°	164.4	3.8
140°-150°	122.6	2.8
150°-160°	85.5	2.0
160°-170°	50.3	1.2
170°-180°	16.3	0.4
0°-30°	886.9	20.5
0°-40°	1427.3	32.9
0°-60°	2447.8	56.4
0°-90°	3063.9	70.6
90°-120°	625.6	14.4
90°-150°	1120.9	25.8
90°-180°	1273.0	29.4
0°-180°	4337.0	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°	1	4	8	10	10	4
95°	12	38	203	59	40	12
105°	40	59	275	481	435	42
115°	70	87	210	461	529	69
125°	97	115	196	356	417	87
135°	114	136	194	293	338	88
145°	130	149	191	240	264	82
155°	148	160	185	210	219	68
165°	162	166	177	188	191	46
175°	168	169	170	172	172	16
180°	169	169	169	169	169	

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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°	0.7	4.1	8.5	9.6	9.9
92.5°	5.1	20.5	63.6	21.7	18.1
95°	11.6	37.8	202.7	59.2	39.6
97.5°	18.5	43.2	311.7	148.7	81.3
100°	25.3	47.6	323.7	311.0	214.3
102.5°	32.5	52.8	301.5	416.4	339.4
105°	39.6	58.6	274.8	480.6	434.8
107.5°	47.2	65.4	251.2	508.8	497.0
110°	55.4	72.4	231.7	509.6	532.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	62.9	79.8	218.7	490.3	539.7
115°	70.1	87.3	210.2	460.9	528.7
117.5°	77.2	94.5	204.4	429.4	504.8
120°	84.8	101.7	200.6	399.8	473.4
122.5°	91.3	108.5	198.2	376.3	444.0
125°	97.4	115.0	196.2	355.5	417.0
127.5°	102.2	121.2	195.2	338.4	393.7
130°	106.6	126.6	194.1	322.6	374.6
132.5°	110.1	131.6	193.8	308.0	355.8
135°	114.2	136.2	193.5	292.8	338.0
137.5°	117.9	140.0	192.8	278.4	319.2
140°	121.7	143.4	192.4	264.4	299.4
142.5°	125.8	146.4	191.7	251.6	281.0
145°	130.2	149.2	191.1	240.2	264.2
147.5°	134.7	152.1	190.0	231.2	249.8
150°	139.1	154.5	188.7	223.4	237.5
152.5°	143.6	157.0	187.0	216.6	227.3
155°	148.0	159.6	184.9	210.2	219.1
157.5°	151.4	161.8	183.2	204.0	211.2
160°	155.5	163.7	181.1	198.4	203.7
162.5°	158.6	165.1	179.1	193.1	196.9
165°	161.7	166.3	177.0	187.8	191.1
167.5°	164.1	167.4	175.0	183.2	185.3
170°	166.1	167.8	172.9	179.1	180.1
172.5°	167.5	168.4	171.2	175.5	175.3
175°	168.5	168.6	169.9	172.3	171.9
177.5°	169.2	168.8	168.8	170.2	169.5
180°	168.8	168.8	168.8	168.8	168.8

(END OF REPORT)