

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: P1011343

Luminaire Tested: S123DIP-B1165D365UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011343
REPORT IS A COMBINATION OF REPORTS P989469 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB30-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

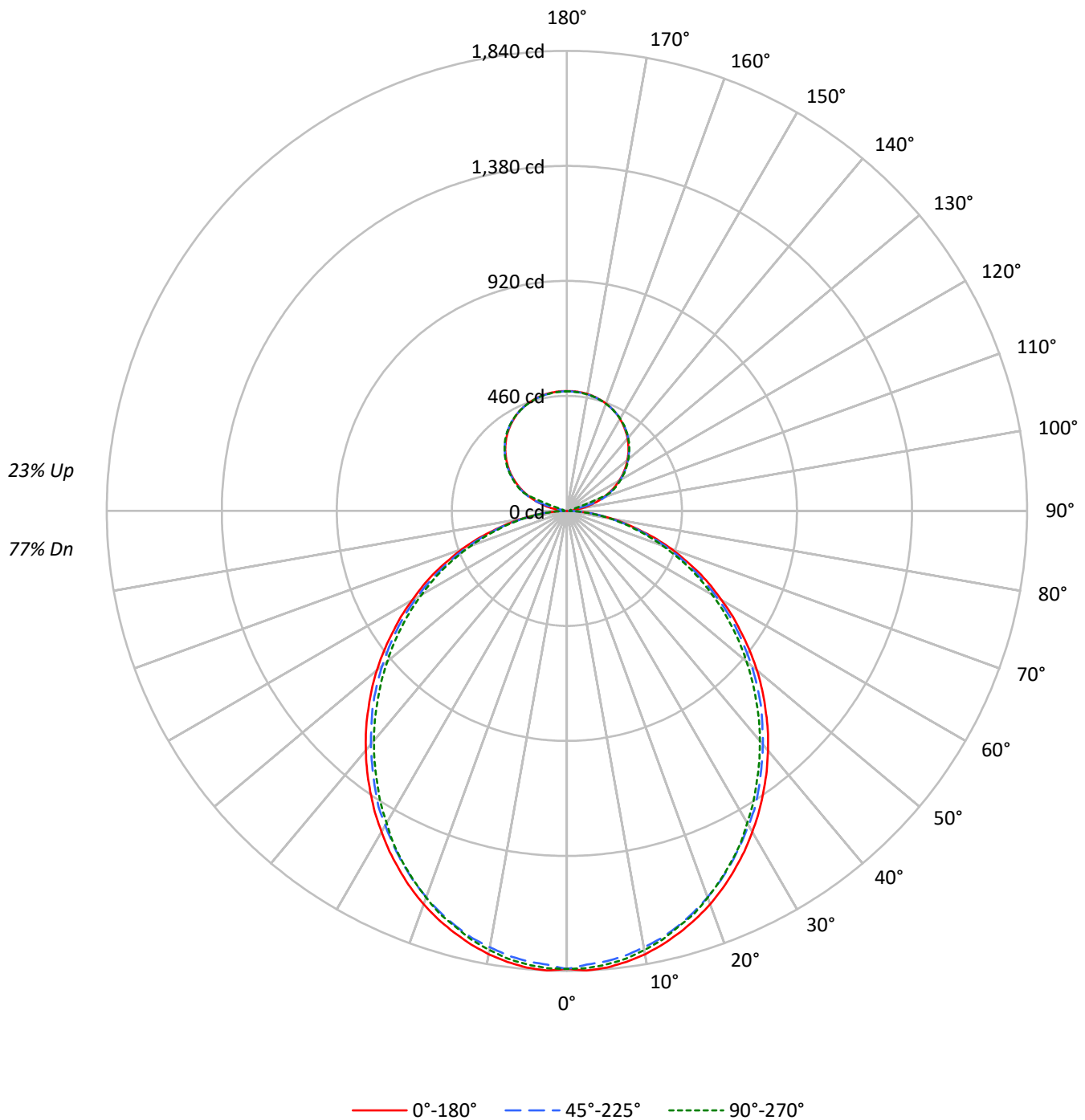
Lumens per Lamp: N/A
Luminaire Lumens: 6228.0 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81
1	104	99	95	91	99	95	91	88	86	83	81	78	76	74	71	69	68
2	94	87	80	75	90	83	77	72	75	71	67	69	65	62	63	60	57
3	86	76	68	62	82	73	66	60	67	61	56	61	56	52	55	52	49
4	79	67	59	53	75	65	57	51	59	53	48	54	49	45	50	45	42
5	73	60	52	45	69	58	50	44	53	47	42	49	43	39	45	40	37
6	67	54	46	40	64	52	44	38	48	41	36	44	39	34	41	36	32
7	62	49	41	35	59	47	39	34	44	37	32	40	35	30	37	32	29
8	58	45	37	31	55	43	36	30	40	33	29	37	31	27	34	29	26
9	54	41	33	28	51	40	32	27	37	30	26	34	28	25	31	27	23
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	25	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19719	19719	19719
5°	19769	19039	19011
10°	19593	18395	18206
15°	19321	17724	17330
20°	19008	16981	16460
25°	18604	16196	15531
30°	18162	15383	14554
35°	17699	14553	13583
40°	17214	13682	12629
45°	16681	12833	11630
50°	16138	11887	10629
55°	15441	10901	9615
60°	14725	9813	8534
65°	14052	8636	7407
70°	13081	7331	6093
75°	11686	5806	4730
80°	10092	4080	3345
85°	7867	2194	1676

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16681 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.7	2.8
10°-20°	487.7	7.8
20°-30°	720.3	11.6
30°-40°	841.2	13.5
40°-50°	845.7	13.6
50°-60°	742.9	11.9
60°-70°	553.3	8.9
70°-80°	314.9	5.1
80°-90°	90.5	1.5
90°-100°	16.9	0.3
100°-110°	81.6	1.3
110°-120°	200.0	3.2
120°-130°	253.8	4.1
130°-140°	271.2	4.4
140°-150°	253.6	4.1
150°-160°	204.5	3.3
160°-170°	132.0	2.1
170°-180°	45.5	0.7
0°-30°	1380.7	22.2
0°-40°	2221.8	35.7
0°-60°	3810.4	61.2
0°-90°	4769.0	76.6
90°-120°	298.5	4.8
90°-150°	1077.0	17.3
90°-180°	1459.0	23.4
0°-180°	6228.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1832	1832	1832	1832	1832	
5°	1834	1826	1808	1824	1821	174
15°	1745	1739	1719	1731	1722	492
25°	1585	1575	1555	1556	1552	730
35°	1370	1361	1341	1331	1323	857
45°	1123	1117	1096	1078	1070	867
55°	852	851	830	813	805	763
65°	581	573	558	545	540	573
75°	307	301	296	288	284	328
85°	82	79	79	76	76	88
90°	0	4	8	10	11	7
95°	22	7	11	14	14	26
105°	106	110	78	15	16	112
115°	199	201	204	208	209	196
125°	280	283	284	285	286	250
135°	349	351	352	353	352	269
145°	402	405	406	406	406	252
155°	443	443	443	445	443	204
165°	468	466	466	469	466	132
175°	479	477	477	480	477	46
180°	479	479	479	479	479	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1832.0	1832.0	1832.0	1832.0	1832.0
2.5°	1839.9	1833.6	1816.3	1832.0	1830.5
5°	1833.6	1825.7	1808.4	1824.2	1821.0
7.5°	1819.4	1811.6	1794.2	1808.4	1806.8
10°	1800.5	1792.7	1772.2	1786.4	1783.2
12.5°	1775.3	1769.0	1750.1	1759.6	1758.0
15°	1745.4	1739.1	1718.6	1731.2	1721.8
17.5°	1712.3	1704.4	1684.0	1693.4	1690.3
20°	1674.5	1665.1	1644.6	1650.9	1646.2
22.5°	1632.0	1622.5	1602.1	1606.8	1600.5
25°	1584.7	1575.3	1554.8	1556.4	1551.6
27.5°	1535.9	1526.4	1504.4	1506.0	1501.2
30°	1482.3	1474.5	1452.4	1452.4	1441.4
32.5°	1428.8	1417.7	1402.0	1391.0	1386.2
35°	1370.5	1361.0	1340.6	1331.1	1323.2
37.5°	1312.2	1299.6	1279.1	1268.1	1263.4
40°	1250.8	1241.3	1219.3	1206.7	1200.4
42.5°	1189.3	1178.3	1156.3	1143.6	1137.3
45°	1123.2	1116.9	1096.4	1077.5	1069.6
47.5°	1058.6	1049.1	1030.2	1011.3	1005.0
50°	992.4	984.5	964.1	946.7	937.3
52.5°	923.1	918.4	896.3	882.2	872.7
55°	852.2	850.6	830.2	812.8	805.0
57.5°	786.1	779.8	764.0	748.3	738.8
60°	713.6	712.0	693.1	678.9	671.1
62.5°	649.0	644.3	625.4	611.2	606.5
65°	581.3	573.4	557.6	545.0	540.3
67.5°	508.8	502.5	489.9	478.9	472.6
70°	444.2	434.8	425.3	414.3	406.4
72.5°	376.5	370.2	359.2	349.7	346.6
75°	307.2	300.9	296.2	288.3	283.5
77.5°	245.7	242.6	236.3	230.0	230.0
80°	185.9	181.2	178.0	176.4	176.4
82.5°	127.6	127.6	127.6	124.4	122.9
85°	81.9	78.8	78.8	75.6	75.6
87.5°	41.0	36.2	34.7	33.1	33.1
90°	0.4	3.9	8.5	10.0	10.7
92.5°	8.2	6.0	9.2	11.7	12.1
95°	21.7	7.1	11.0	13.5	13.5
97.5°	39.5	29.5	11.4	14.2	14.6
100°	60.1	67.2	11.7	14.6	14.9
102.5°	83.6	88.2	26.3	14.6	15.3
105°	106.0	109.9	77.9	14.9	15.6
107.5°	129.8	133.0	138.3	83.6	37.0
110°	153.6	156.5	160.4	148.6	97.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.4	178.9	182.8	186.0	185.3
115°	198.8	200.9	204.1	207.7	209.1
117.5°	220.8	223.3	225.1	227.9	228.3
120°	241.1	244.3	245.3	248.2	248.2
122.5°	261.7	264.2	265.6	267.4	267.7
125°	280.2	283.0	284.5	285.2	285.9
127.5°	298.7	301.5	303.3	304.4	303.7
130°	315.7	318.6	320.0	321.4	320.7
132.5°	332.1	334.9	336.0	337.4	336.4
135°	348.8	350.9	352.4	353.4	352.4
137.5°	363.0	365.9	366.6	368.4	367.7
140°	377.3	379.4	380.5	381.9	381.2
142.5°	390.4	392.5	393.6	394.7	393.6
145°	402.5	405.0	405.7	406.4	406.4
147.5°	414.2	416.0	416.7	417.4	415.7
150°	424.9	426.0	426.7	427.4	426.3
152.5°	434.5	434.9	435.2	436.6	434.9
155°	443.4	442.7	443.0	444.8	442.7
157.5°	450.5	450.5	450.2	452.3	449.4
160°	456.9	456.6	456.2	458.3	455.8
162.5°	463.0	461.9	461.5	464.0	461.9
165°	467.6	466.5	466.2	469.0	466.5
167.5°	471.5	470.1	470.1	472.9	470.1
170°	474.7	473.3	473.3	476.1	473.3
172.5°	476.8	475.0	475.4	478.2	475.0
175°	478.6	476.8	477.2	479.7	476.8
177.5°	479.3	477.5	477.9	480.7	477.2
180°	478.6	478.6	478.6	478.6	478.6

(END OF REPORT)