

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: P1011431

Luminaire Tested: S123DIP-B1165D805UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011431
REPORT IS A COMBINATION OF REPORTS P989590 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D805UB30-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

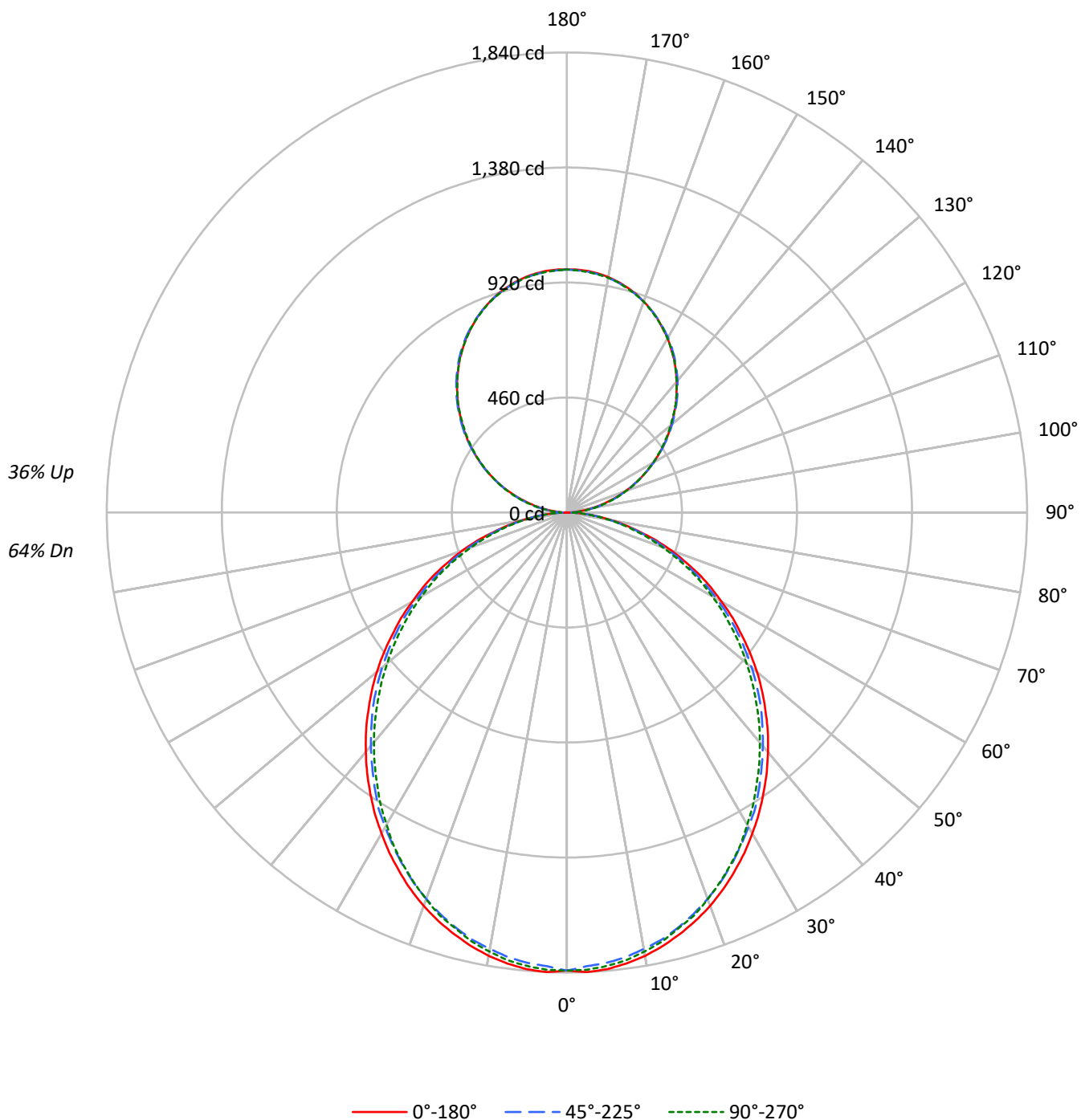
Lumens per Lamp: N/A
Luminaire Lumens: 7463.0 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 82.4
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	110	110	110	110	104	104	104	104	91	91	91	80	80	80	69	69	69
1	101	96	92	89	94	91	87	84	80	77	75	70	68	66	61	59	58
2	92	84	78	72	86	79	74	69	70	66	62	61	58	55	53	51	49
3	84	74	66	60	78	70	63	58	62	56	52	54	50	47	47	44	42
4	77	66	57	51	72	62	55	49	55	49	44	48	44	40	42	39	36
5	70	58	50	44	66	55	48	42	49	43	38	43	39	35	38	34	31
6	65	53	44	38	61	50	42	37	44	38	34	39	34	30	35	31	27
7	60	47	39	34	56	45	38	32	40	34	30	36	31	27	32	28	24
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22
9	52	40	32	27	49	38	30	26	34	28	24	30	25	22	27	23	20
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18

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	2.3
10°-20°	487.7	6.5
20°-30°	720.3	9.7
30°-40°	841.2	11.3
40°-50°	845.7	11.3
50°-60°	742.9	10.0
60°-70°	553.3	7.4
70°-80°	314.9	4.2
80°-90°	91.6	1.2
90°-100°	62.6	0.8
100°-110°	189.4	2.5
110°-120°	322.4	4.3
120°-130°	424.1	5.7
130°-140°	476.7	6.4
140°-150°	468.7	6.3
150°-160°	394.6	5.3
160°-170°	262.7	3.5
170°-180°	92.0	1.2
0°-30°	1380.7	18.5
0°-40°	2221.8	29.8
0°-60°	3810.4	51.1
0°-90°	4770.1	63.9
90°-120°	574.3	7.7
90°-150°	1943.8	26.0
90°-180°	2693.0	36.1
0°-180°	7463.0	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°	1	8	18	21	23	9
95°	45	50	56	60	60	50
105°	172	173	180	180	182	184
115°	324	327	325	326	325	321
125°	475	477	476	473	470	424
135°	616	621	620	617	615	475
145°	747	749	751	750	747	467
155°	856	856	857	860	854	394
165°	932	930	930	934	929	263
175°	970	967	967	971	966	92
180°	972	972	972	972	972	

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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°	0.8	8.4	18.3	21.4	22.9
92.5°	22.9	27.5	32.1	34.4	32.8
95°	45.0	50.4	56.5	59.6	59.6
97.5°	74.1	77.9	82.5	86.3	85.5
100°	103.8	108.4	112.2	114.5	116.0
102.5°	138.2	140.5	145.8	148.1	147.3
105°	171.8	173.3	180.2	180.2	181.7
107.5°	211.5	212.2	215.3	217.6	216.8
110°	248.1	249.7	251.2	254.2	252.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	286.3	287.1	287.1	290.9	290.9
115°	324.5	326.8	325.2	326.0	325.2
117.5°	363.4	364.2	362.6	362.6	360.4
120°	399.3	403.9	400.1	399.3	397.8
122.5°	436.7	439.8	438.2	435.9	433.7
125°	474.9	477.2	475.6	472.6	469.5
127.5°	510.0	514.6	513.1	508.5	505.4
130°	545.1	551.2	548.9	545.9	540.5
132.5°	580.2	586.3	584.8	581.0	577.2
135°	616.1	620.7	619.9	616.9	615.4
137.5°	648.9	652.8	655.1	651.2	648.9
140°	683.3	687.1	687.9	687.1	681.8
142.5°	714.6	718.4	720.0	719.2	715.4
145°	747.4	749.0	751.3	750.5	747.4
147.5°	775.7	778.7	781.0	781.0	776.4
150°	805.5	807.0	808.5	808.5	803.9
152.5°	829.9	832.2	832.9	834.5	830.7
155°	855.8	855.8	856.6	859.7	854.3
157.5°	878.0	877.2	878.0	881.0	876.5
160°	898.6	897.1	897.1	900.9	897.8
162.5°	916.9	914.6	915.4	919.2	913.9
165°	932.2	929.9	929.9	934.5	929.1
167.5°	945.2	942.1	942.9	947.5	942.9
170°	955.9	952.8	952.8	958.2	952.8
172.5°	964.3	961.2	961.2	965.8	960.4
175°	969.6	966.6	966.6	971.1	965.8
177.5°	972.7	969.6	969.6	974.2	968.8
180°	971.9	971.9	971.9	971.9	971.9

(END OF REPORT)