

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: P1031419

Luminaire Tested: S123DIW-B1165D1030UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031419
REPORT IS A COMBINATION OF REPORTS P990886 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1030UB30-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

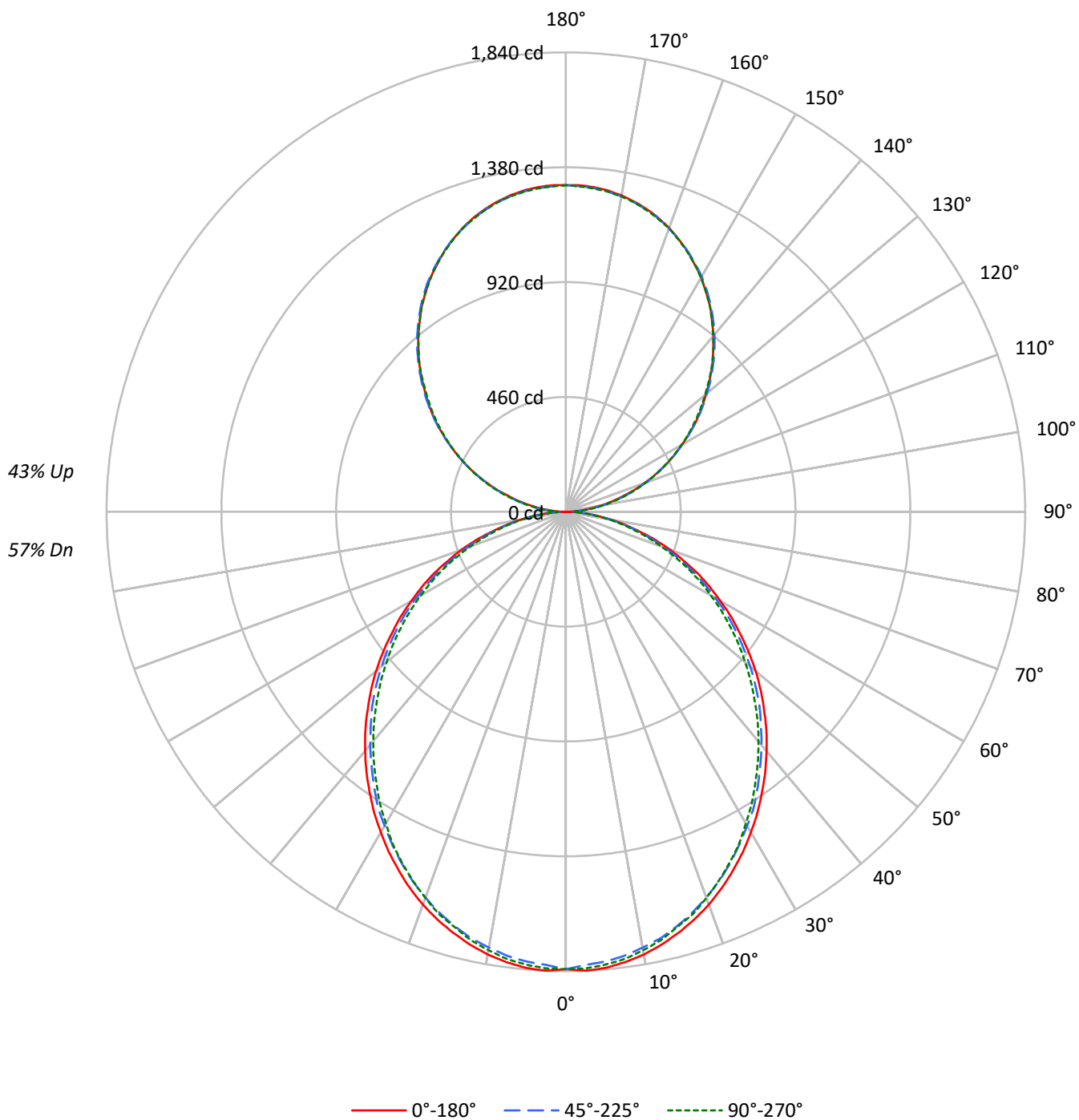
Lumens per Lamp: N/A
Luminaire Lumens: 8395.0 lumens
Efficiency: N/A
Efficacy: 90.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 92.8
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	87	92	88	85	82	76	74	71	65	63	62	55	54	53
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44
3	82	73	65	59	76	68	61	56	59	54	50	51	47	44	43	40	38
4	75	64	56	50	70	60	53	48	52	47	42	45	41	37	38	35	32
5	69	57	49	43	64	54	46	41	47	41	37	40	36	32	35	31	28
6	64	52	43	37	59	48	41	36	42	36	32	37	32	28	31	28	25
7	59	47	38	33	55	44	36	31	38	32	28	33	29	25	29	25	22
8	55	42	34	29	51	40	33	28	35	29	25	30	26	22	26	23	20
9	51	39	31	26	47	36	29	25	32	26	22	28	23	20	24	21	18
10	48	35	28	23	44	33	27	22	30	24	20	26	21	18	23	19	16

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	2.1
10°-20°	487.7	5.8
20°-30°	720.3	8.6
30°-40°	841.2	10.0
40°-50°	845.7	10.1
50°-60°	742.9	8.8
60°-70°	553.3	6.6
70°-80°	314.9	3.8
80°-90°	92.3	1.1
90°-100°	84.2	1.0
100°-110°	254.8	3.0
110°-120°	433.9	5.2
120°-130°	570.8	6.8
130°-140°	641.6	7.6
140°-150°	630.7	7.5
150°-160°	531.0	6.3
160°-170°	353.5	4.2
170°-180°	123.8	1.5
0°-30°	1380.7	16.4
0°-40°	2221.8	26.5
0°-60°	3810.4	45.4
0°-90°	4770.8	56.8
90°-120°	772.9	9.2
90°-150°	2615.9	31.2
90°-180°	3624.0	43.2
0°-180°	8395.0	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	11	25	29	31	10
95°	61	68	76	80	80	67
105°	231	233	242	242	244	247
115°	437	440	438	439	438	432
125°	639	642	640	636	632	570
135°	829	835	834	830	828	639
145°	1006	1008	1011	1010	1006	628
155°	1152	1152	1153	1157	1150	530
165°	1255	1252	1252	1258	1250	354
175°	1305	1301	1301	1307	1300	124
180°	1308	1308	1308	1308	1308	

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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°	1.0	11.3	24.7	28.8	30.8
92.5°	30.8	37.0	43.2	46.2	44.2
95°	60.6	67.8	76.0	80.1	80.1
97.5°	99.7	104.8	111.0	116.1	115.1
100°	139.7	145.9	151.0	154.1	156.2
102.5°	186.0	189.1	196.3	199.3	198.3
105°	231.2	233.2	242.5	242.5	244.5
107.5°	284.6	285.6	289.8	292.8	291.8
110°	333.9	336.0	338.0	342.2	340.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	385.3	386.3	386.3	391.5	391.5
115°	436.7	439.8	437.7	438.7	437.7
117.5°	489.1	490.1	488.1	488.1	485.0
120°	537.4	543.5	538.4	537.4	535.3
122.5°	587.7	591.8	589.8	586.7	583.6
125°	639.1	642.2	640.1	636.0	631.9
127.5°	686.4	692.5	690.5	684.3	680.2
130°	733.6	741.9	738.8	734.7	727.5
132.5°	780.9	789.1	787.1	781.9	776.8
135°	829.2	835.4	834.3	830.2	828.2
137.5°	873.4	878.5	881.6	876.5	873.4
140°	919.6	924.7	925.8	924.7	917.6
142.5°	961.7	966.9	968.9	967.9	962.8
145°	1005.9	1008.0	1011.1	1010.0	1005.9
147.5°	1043.9	1048.0	1051.1	1051.1	1045.0
150°	1084.0	1086.1	1088.1	1088.1	1082.0
152.5°	1116.9	1120.0	1121.0	1123.1	1117.9
155°	1151.8	1151.8	1152.8	1157.0	1149.8
157.5°	1181.6	1180.6	1181.6	1185.7	1179.6
160°	1209.4	1207.3	1207.3	1212.4	1208.3
162.5°	1234.0	1230.9	1232.0	1237.1	1229.9
165°	1254.6	1251.5	1251.5	1257.7	1250.5
167.5°	1272.0	1267.9	1269.0	1275.1	1269.0
170°	1286.4	1282.3	1282.3	1289.5	1282.3
172.5°	1297.7	1293.6	1293.6	1299.8	1292.6
175°	1304.9	1300.8	1300.8	1307.0	1299.8
177.5°	1309.0	1304.9	1304.9	1311.1	1303.9
180°	1308.0	1308.0	1308.0	1308.0	1308.0

(END OF REPORT)