

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: P1031532

Luminaire Tested: S123DIW-B1165D755UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031532
REPORT IS A COMBINATION OF REPORTS P991149 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D755UB30-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

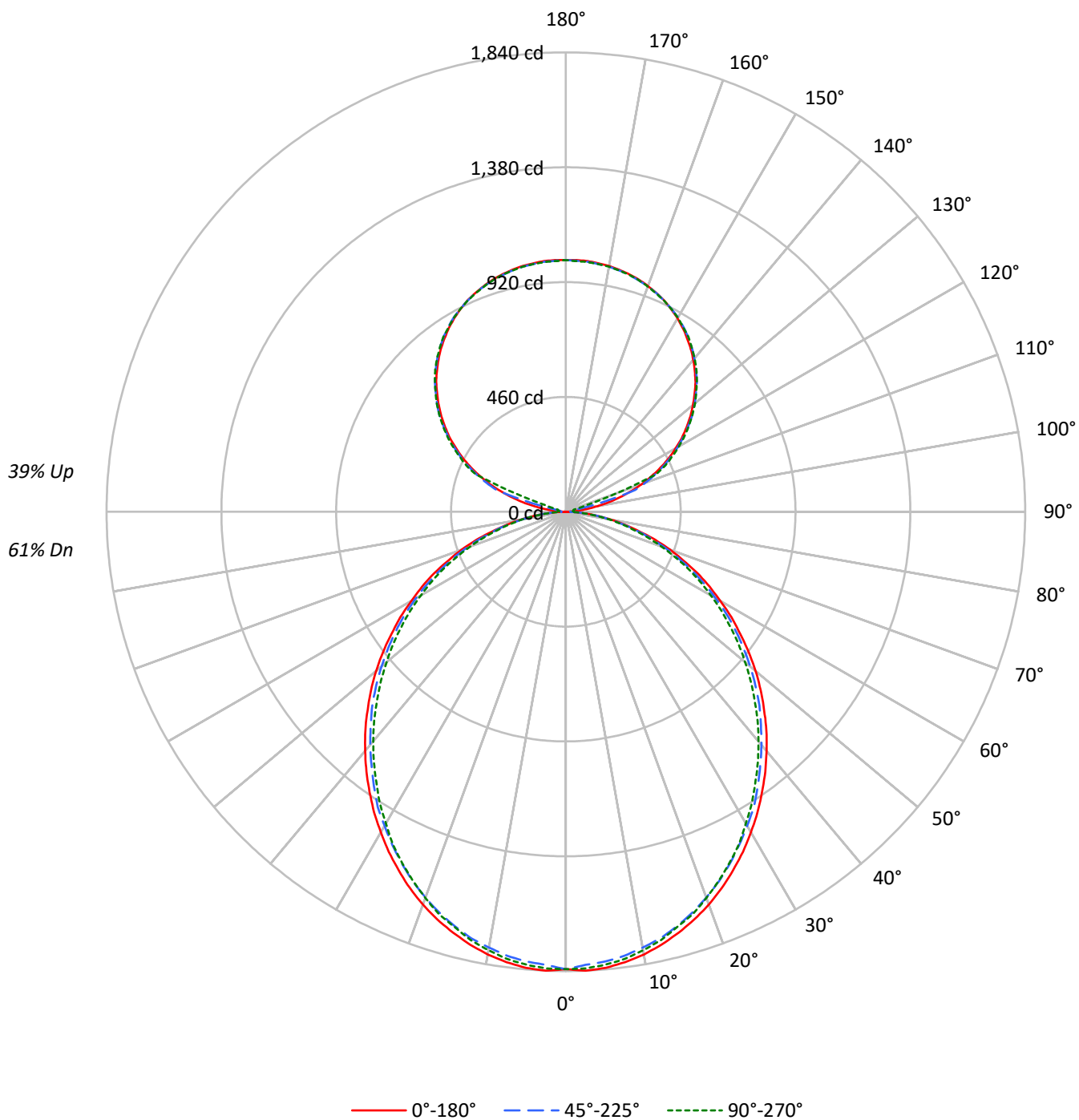
Lumens per Lamp: N/A
Luminaire Lumens: 7842.0 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 84.5
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	103	103	103	103	89	89	89	77	77	77	66	66	66
1	100	96	92	88	93	90	86	83	78	76	73	68	66	64	58	57	56
2	91	84	77	72	85	78	73	68	69	64	61	60	56	54	51	49	47
3	83	73	66	60	77	69	62	57	60	55	51	53	49	45	45	42	40
4	76	65	57	51	71	61	54	48	54	48	44	47	42	39	41	37	34
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	37	33	30
6	64	52	44	38	60	49	42	36	43	37	33	38	33	30	33	29	26
7	60	47	39	33	56	44	37	32	39	33	29	35	30	26	30	26	23
8	55	43	35	29	52	40	33	28	36	30	26	32	27	23	28	24	21
9	52	39	31	26	48	37	30	25	33	27	23	29	24	21	26	22	19
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	24	20	17

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	2.2
10°-20°	487.7	6.2
20°-30°	720.3	9.2
30°-40°	841.2	10.7
40°-50°	845.7	10.8
50°-60°	742.9	9.5
60°-70°	553.3	7.1
70°-80°	314.9	4.0
80°-90°	91.5	1.2
90°-100°	35.5	0.5
100°-110°	171.8	2.2
110°-120°	421.0	5.4
120°-130°	534.5	6.8
130°-140°	571.0	7.3
140°-150°	533.9	6.8
150°-160°	430.6	5.5
160°-170°	277.9	3.5
170°-180°	95.8	1.2
0°-30°	1380.7	17.6
0°-40°	2221.8	28.3
0°-60°	3810.4	48.6
0°-90°	4770.0	60.8
90°-120°	628.3	8.0
90°-150°	2267.7	28.9
90°-180°	3072.0	39.2
0°-180°	7842.0	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	22	8
95°	46	15	23	28	28	55
105°	223	231	164	31	33	237
115°	418	423	430	437	440	413
125°	590	596	599	600	602	527
135°	734	739	742	744	742	565
145°	848	853	854	856	856	531
155°	934	932	933	937	932	430
165°	984	982	982	988	982	278
175°	1008	1004	1005	1010	1004	96
180°	1008	1008	1008	1008	1008	

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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°	0.7	8.2	18.0	21.0	22.5
92.5°	17.2	12.7	19.5	24.7	25.5
95°	45.7	15.0	23.2	28.4	28.4
97.5°	83.1	62.1	24.0	29.9	30.7
100°	126.5	141.5	24.7	30.7	31.4
102.5°	175.9	185.7	55.4	30.7	32.2
105°	223.1	231.3	164.0	31.4	32.9
107.5°	273.3	280.0	291.2	175.9	77.9
110°	323.4	329.4	337.6	312.9	205.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	371.3	376.6	384.8	391.5	390.0
115°	418.5	423.0	429.7	437.2	440.2
117.5°	464.9	470.1	473.9	479.9	480.6
120°	507.6	514.3	516.6	522.6	522.6
122.5°	551.0	556.2	559.2	563.0	563.7
125°	589.9	595.9	598.9	600.4	601.9
127.5°	628.9	634.9	638.6	640.8	639.3
130°	664.8	670.8	673.8	676.8	675.3
132.5°	699.2	705.2	707.5	710.5	708.2
135°	734.4	738.9	741.9	744.2	741.9
137.5°	764.4	770.4	771.9	775.6	774.1
140°	794.3	798.8	801.1	804.0	802.5
142.5°	822.0	826.5	828.8	831.0	828.8
145°	847.5	852.7	854.2	855.7	855.7
147.5°	872.2	875.9	877.4	878.9	875.2
150°	894.6	896.9	898.4	899.9	897.6
152.5°	914.8	915.6	916.3	919.3	915.6
155°	933.6	932.1	932.8	936.6	932.1
157.5°	948.5	948.5	947.8	952.3	946.3
160°	962.0	961.3	960.5	965.0	959.8
162.5°	974.7	972.5	971.7	977.0	972.5
165°	984.5	982.2	981.5	987.5	982.2
167.5°	992.7	989.7	989.7	995.7	989.7
170°	999.4	996.4	996.4	1002.4	996.4
172.5°	1003.9	1000.2	1000.9	1006.9	1000.2
175°	1007.7	1003.9	1004.7	1009.9	1003.9
177.5°	1009.2	1005.4	1006.2	1012.2	1004.7
180°	1007.7	1007.7	1007.7	1007.7	1007.7

(END OF REPORT)