

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: P1031533

Luminaire Tested: S123DIW-B1165D755UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031533
REPORT IS A COMBINATION OF REPORTS P991150 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-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

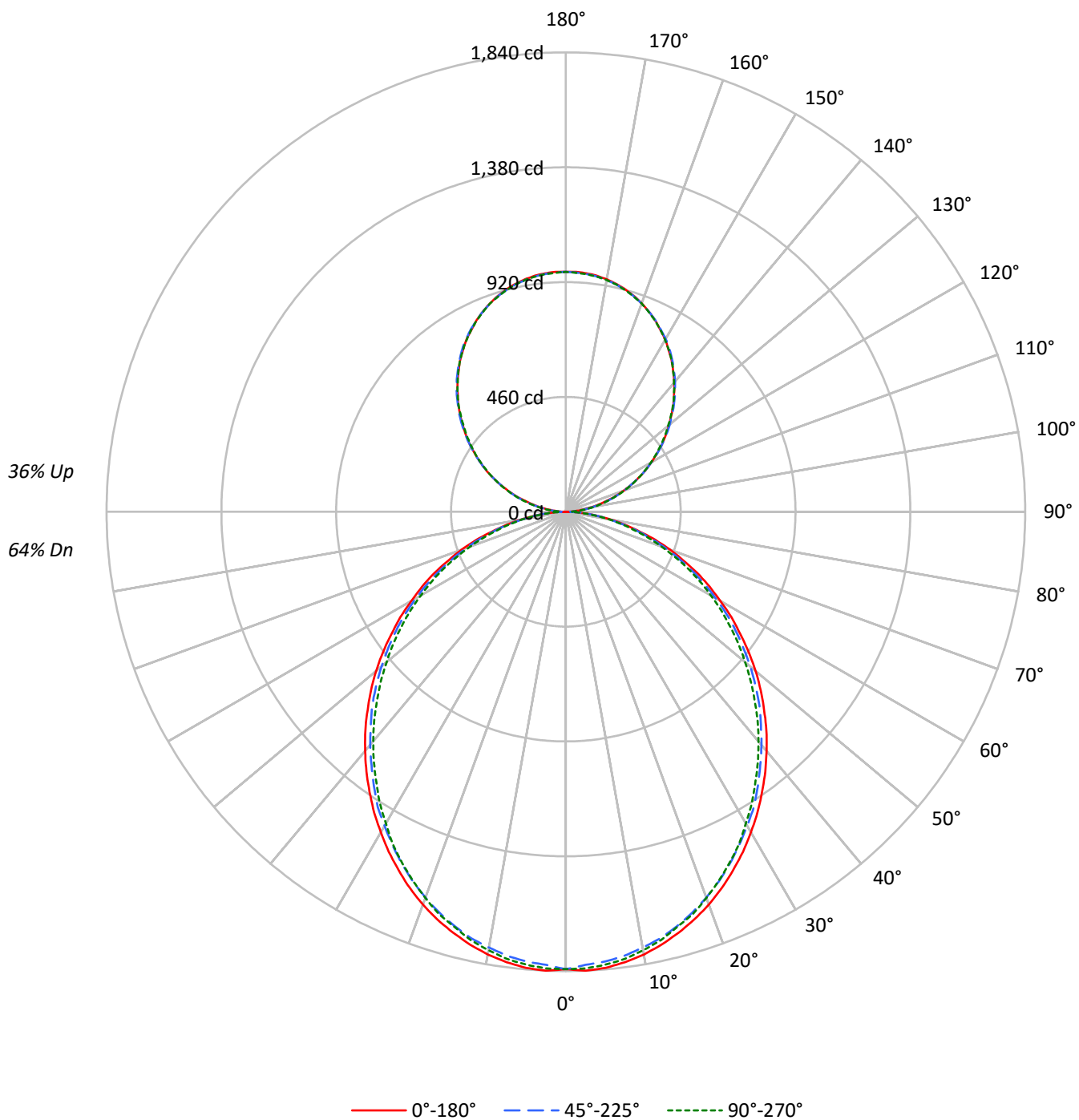
Lumens per Lamp: N/A
Luminaire Lumens: 7433.0 lumens
Efficiency: N/A
Efficacy: 88.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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

TEST NUMBER: P1031533

CATALOG NUMBER: S123DIW-B1165D755UB30-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1031533

CATALOG NUMBER: S123DIW-B1165D755UB30-4F0-XX-W2A-F1

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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69
1	101	96	92	89	95	91	87	84	80	77	75	70	68	66	61	60	58
2	92	84	78	73	86	79	74	69	70	66	62	62	58	55	54	51	49
3	84	74	66	60	78	70	63	58	62	56	52	54	50	47	48	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	44	39	35	38	34	31
6	65	53	44	38	61	50	42	37	44	38	34	39	34	31	35	31	28
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25
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

TEST NUMBER: P1031533

CATALOG NUMBER: S123DIW-B1165D755UB30-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.7	2.3
10°-20°	487.7	6.6
20°-30°	720.3	9.7
30°-40°	841.2	11.3
40°-50°	845.7	11.4
50°-60°	742.9	10.0
60°-70°	553.3	7.4
70°-80°	314.9	4.2
80°-90°	91.5	1.2
90°-100°	61.9	0.8
100°-110°	187.3	2.5
110°-120°	318.8	4.3
120°-130°	419.4	5.6
130°-140°	471.4	6.3
140°-150°	463.4	6.2
150°-160°	390.2	5.2
160°-170°	259.7	3.5
170°-180°	91.0	1.2
0°-30°	1380.7	18.6
0°-40°	2221.8	29.9
0°-60°	3810.4	51.3
0°-90°	4770.0	64.2
90°-120°	567.9	7.6
90°-150°	1922.1	25.9
90°-180°	2663.0	35.8
0°-180°	7433.0	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°	44	50	56	59	59	49
105°	170	171	178	178	180	182
115°	321	323	322	322	322	318
125°	470	472	470	467	464	419
135°	609	614	613	610	608	469
145°	739	741	743	742	739	462
155°	846	846	847	850	845	390
165°	922	920	920	924	919	260
175°	959	956	956	960	955	91
180°	961	961	961	961	961	

TEST NUMBER: P1031533

CATALOG NUMBER: S123DIW-B1165D755UB30-4F0-XX-W2A-F1

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	8.3	18.1	21.1	22.6
92.5°	22.6	27.2	31.7	34.0	32.5
95°	44.5	49.8	55.9	58.9	58.9
97.5°	73.2	77.0	81.5	85.3	84.6
100°	102.7	107.2	111.0	113.2	114.8
102.5°	136.6	138.9	144.2	146.5	145.7
105°	169.9	171.4	178.2	178.2	179.7
107.5°	209.1	209.9	212.9	215.2	214.4
110°	245.4	246.9	248.4	251.4	249.9

TEST NUMBER: P1031533

CATALOG NUMBER: S123DIW-B1165D755UB30-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.1	283.9	283.9	287.6	287.6
115°	320.9	323.1	321.6	322.4	321.6
117.5°	359.4	360.1	358.6	358.6	356.3
120°	394.8	399.4	395.6	394.8	393.3
122.5°	431.8	434.9	433.4	431.1	428.8
125°	469.6	471.9	470.3	467.3	464.3
127.5°	504.3	508.8	507.3	502.8	499.8
130°	539.0	545.1	542.8	539.8	534.5
132.5°	573.8	579.8	578.3	574.5	570.8
135°	609.3	613.8	613.0	610.0	608.5
137.5°	641.7	645.5	647.8	644.0	641.7
140°	675.7	679.5	680.2	679.5	674.2
142.5°	706.7	710.4	711.9	711.2	707.4
145°	739.1	740.6	742.9	742.1	739.1
147.5°	767.0	770.1	772.3	772.3	767.8
150°	796.5	798.0	799.5	799.5	795.0
152.5°	820.7	822.9	823.7	825.2	821.4
155°	846.3	846.3	847.1	850.1	844.8
157.5°	868.2	867.5	868.2	871.2	866.7
160°	888.6	887.1	887.1	890.9	887.8
162.5°	906.7	904.5	905.2	909.0	903.7
165°	921.8	919.6	919.6	924.1	918.8
167.5°	934.7	931.6	932.4	936.9	932.4
170°	945.2	942.2	942.2	947.5	942.2
172.5°	953.5	950.5	950.5	955.0	949.8
175°	958.8	955.8	955.8	960.3	955.0
177.5°	961.8	958.8	958.8	963.3	958.1
180°	961.1	961.1	961.1	961.1	961.1

(END OF REPORT)