

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: P1031502

Luminaire Tested: S123DIW-B1165D460UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031502
REPORT IS A COMBINATION OF REPORTS P991083 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D460UB30-4F0-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

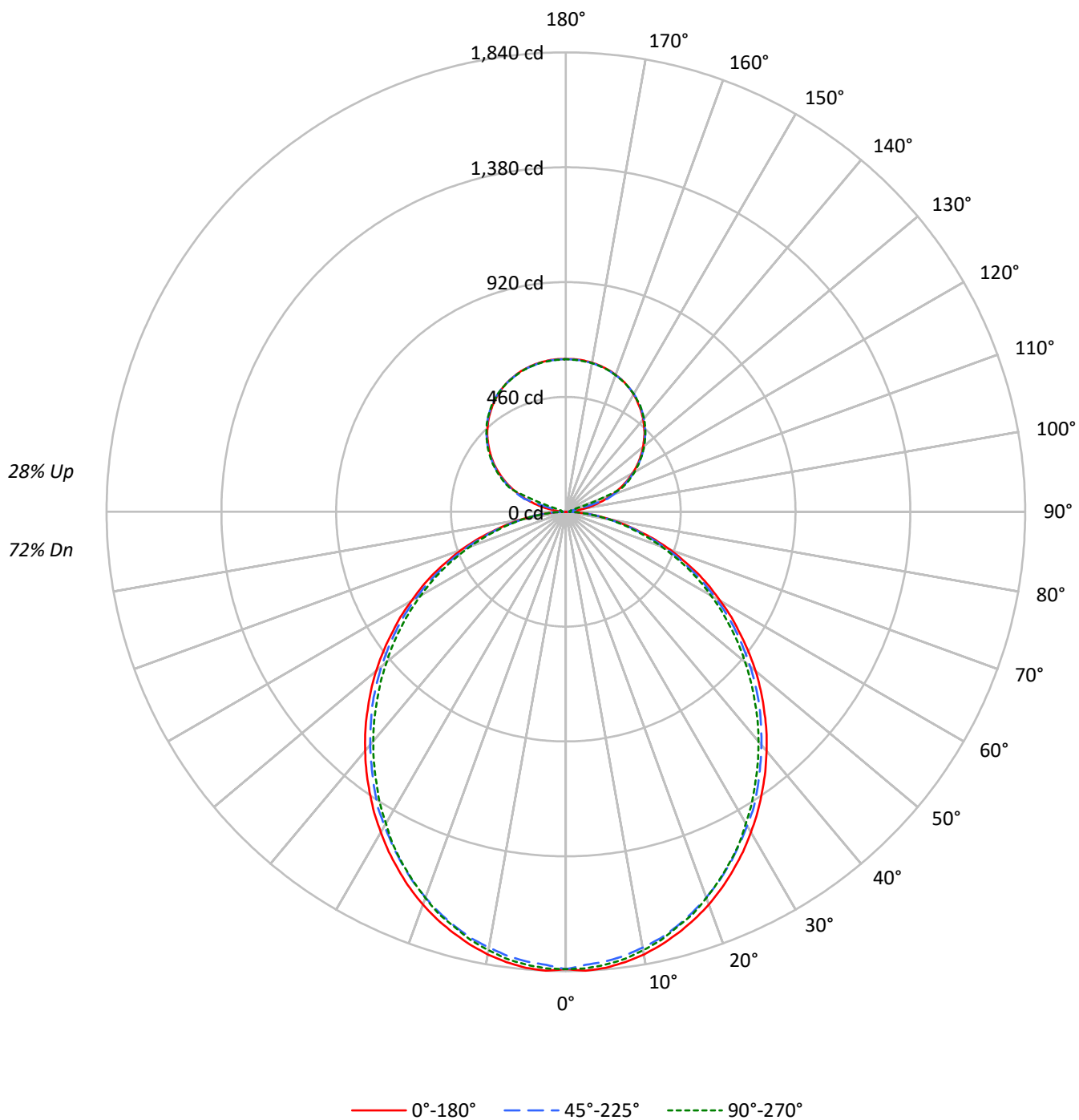
Lumens per Lamp: N/A
Luminaire Lumens: 6633.0 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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: P1031502

CATALOG NUMBER: S123DIW-B1165D460UB30-4F0-XX-W2A-F

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	112	112	112	112	106	106	106	106	96	96	96	85	85	85	76	76	76
1	103	98	94	90	97	93	90	86	84	81	79	75	73	71	67	66	64
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54
3	85	75	68	62	80	72	65	59	65	59	55	58	54	50	52	49	46
4	78	67	58	52	74	64	56	50	58	51	47	52	47	43	47	43	40
5	72	60	51	45	68	57	49	43	52	45	40	47	42	37	42	38	35
6	66	54	45	39	63	51	43	38	47	40	35	42	37	33	38	34	30
7	61	49	40	34	58	46	39	33	42	36	31	39	33	29	35	31	27
8	57	44	36	31	54	42	35	30	39	32	28	35	30	26	32	28	24
9	53	40	33	27	50	39	32	27	36	29	25	33	27	23	30	25	22
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	28	23	20

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: P1031502

CATALOG NUMBER: S123DIW-B1165D460UB30-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.7	2.6
10°-20°	487.7	7.4
20°-30°	720.3	10.9
30°-40°	841.2	12.7
40°-50°	845.7	12.7
50°-60°	742.9	11.2
60°-70°	553.3	8.3
70°-80°	314.9	4.7
80°-90°	90.7	1.4
90°-100°	21.6	0.3
100°-110°	104.2	1.6
110°-120°	255.4	3.9
120°-130°	324.3	4.9
130°-140°	346.4	5.2
140°-150°	323.9	4.9
150°-160°	261.3	3.9
160°-170°	168.6	2.5
170°-180°	58.1	0.9
0°-30°	1380.7	20.8
0°-40°	2221.8	33.5
0°-60°	3810.4	57.4
0°-90°	4769.2	71.9
90°-120°	381.2	5.7
90°-150°	1375.8	20.7
90°-180°	1864.0	28.1
0°-180°	6633.0	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	5	11	13	14	7
95°	28	9	14	17	17	33
105°	135	140	100	19	20	144
115°	254	257	261	265	267	251
125°	358	362	363	364	365	320
135°	446	448	450	452	450	343
145°	514	517	518	519	519	322
155°	566	566	566	568	566	261
165°	597	596	596	599	596	169
175°	611	609	610	613	609	58
180°	611	611	611	611	611	

TEST NUMBER: P1031502

CATALOG NUMBER: S123DIW-B1165D460UB30-4F0-XX-W2A-F

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°	0.5	5.0	10.9	12.7	13.6
92.5°	10.4	7.7	11.8	15.0	15.4
95°	27.7	9.1	14.1	17.3	17.3
97.5°	50.4	37.7	14.5	18.2	18.6
100°	76.8	85.8	15.0	18.6	19.1
102.5°	106.7	112.6	33.6	18.6	19.5
105°	135.4	140.3	99.5	19.1	20.0
107.5°	165.8	169.9	176.7	106.7	47.2
110°	196.2	199.8	204.8	189.9	124.9

TEST NUMBER: P1031502

CATALOG NUMBER: S123DIW-B1165D460UB30-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.3	228.5	233.5	237.5	236.6
115°	253.9	256.6	260.7	265.3	267.1
117.5°	282.1	285.2	287.5	291.1	291.6
120°	308.0	312.0	313.4	317.0	317.0
122.5°	334.3	337.5	339.3	341.6	342.0
125°	357.9	361.5	363.4	364.3	365.2
127.5°	381.5	385.2	387.4	388.8	387.9
130°	403.3	407.0	408.8	410.6	409.7
132.5°	424.2	427.9	429.2	431.0	429.7
135°	445.6	448.3	450.1	451.5	450.1
137.5°	463.7	467.4	468.3	470.6	469.6
140°	481.9	484.6	486.0	487.8	486.9
142.5°	498.7	501.4	502.8	504.2	502.8
145°	514.2	517.3	518.2	519.2	519.2
147.5°	529.1	531.4	532.3	533.2	531.0
150°	542.8	544.1	545.0	546.0	544.6
152.5°	555.0	555.5	555.9	557.8	555.5
155°	566.4	565.5	565.9	568.2	565.5
157.5°	575.5	575.5	575.0	577.7	574.1
160°	583.7	583.2	582.7	585.5	582.3
162.5°	591.4	590.0	589.6	592.7	590.0
165°	597.3	595.9	595.5	599.1	595.9
167.5°	602.3	600.5	600.5	604.1	600.5
170°	606.4	604.5	604.5	608.2	604.5
172.5°	609.1	606.8	607.3	610.9	606.8
175°	611.4	609.1	609.5	612.7	609.1
177.5°	612.3	610.0	610.5	614.1	609.5
180°	611.4	611.4	611.4	611.4	611.4

(END OF REPORT)