

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: P1030788

Luminaire Tested: S123DIW-B1165D755UB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030788
REPORT IS A COMBINATION OF REPORTS P991142 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D755UB2750-4F0-XX-W2A-F_5000K
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

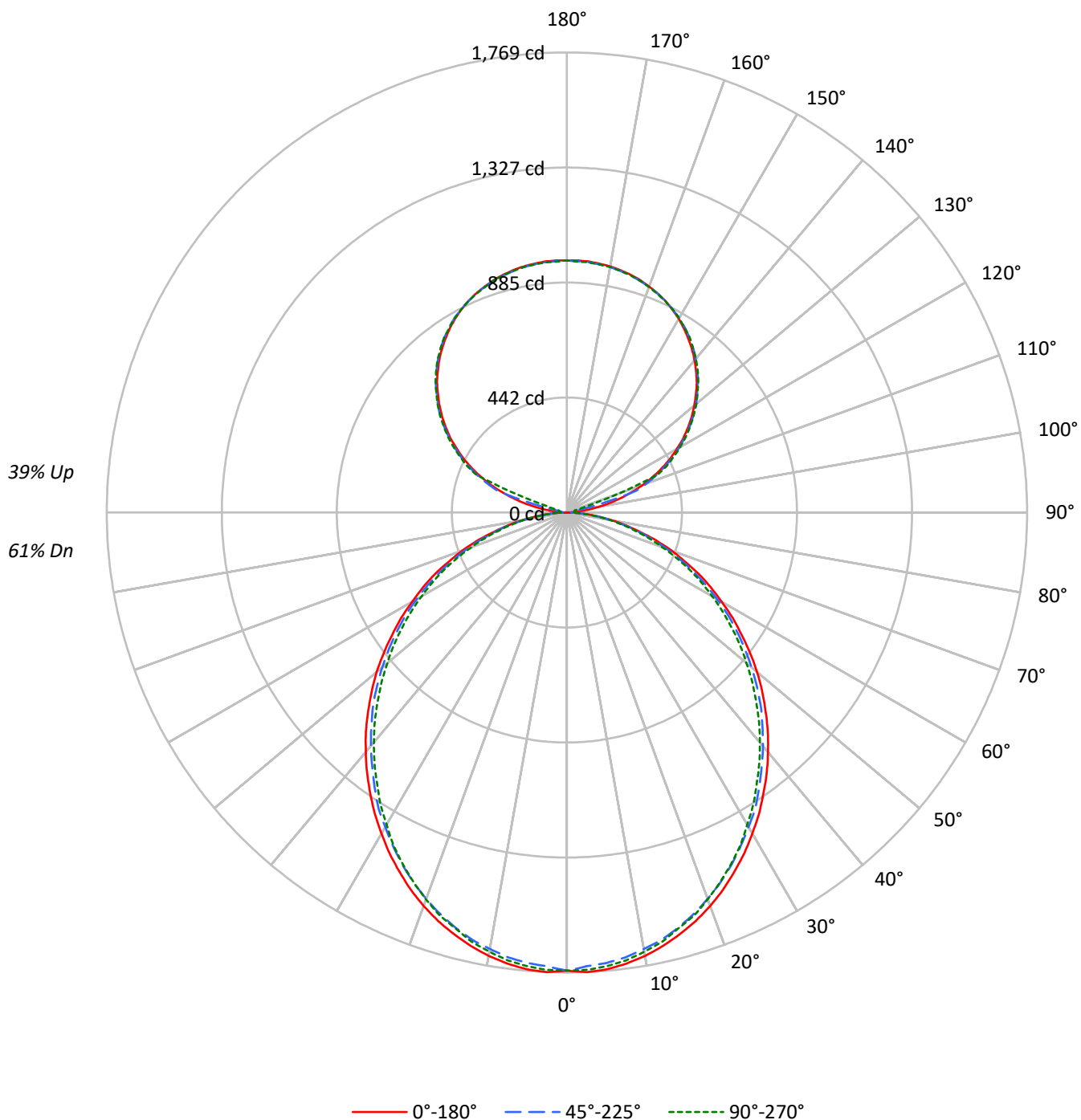
Lumens per Lamp: N/A
Luminaire Lumens: 7540.0 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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				0
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	94	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	61	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°	18963	18963	18963
5°	19010	18309	18281
10°	18841	17689	17508
15°	18579	17045	16664
20°	18278	16330	15828
25°	17890	15574	14935
30°	17464	14793	13996
35°	17020	13994	13061
40°	16554	13157	12144
45°	16041	12340	11184
50°	15518	11431	10221
55°	14849	10482	9245
60°	14159	9436	8206
65°	13513	8305	7123
70°	12581	7050	5860
75°	11237	5583	4550
80°	9702	3924	3218
85°	7569	2108	1611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16041 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.1	2.2
10°-20°	469.0	6.2
20°-30°	692.6	9.2
30°-40°	808.9	10.7
40°-50°	813.2	10.8
50°-60°	714.4	9.5
60°-70°	532.0	7.1
70°-80°	302.8	4.0
80°-90°	88.0	1.2
90°-100°	34.1	0.5
100°-110°	165.2	2.2
110°-120°	404.7	5.4
120°-130°	513.8	6.8
130°-140°	548.9	7.3
140°-150°	513.2	6.8
150°-160°	414.0	5.5
160°-170°	267.2	3.5
170°-180°	92.1	1.2
0°-30°	1327.7	17.6
0°-40°	2136.6	28.3
0°-60°	3664.1	48.6
0°-90°	4586.9	60.8
90°-120°	604.0	8.0
90°-150°	2179.9	28.9
90°-180°	2953.0	39.2
0°-180°	7540.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1762	1762	1762	1762	1762	
5°	1763	1756	1739	1754	1751	167
15°	1678	1672	1653	1665	1656	473
25°	1524	1515	1495	1497	1492	702
35°	1318	1309	1289	1280	1272	825
45°	1080	1074	1054	1036	1029	834
55°	820	818	798	782	774	734
65°	559	551	536	524	520	551
75°	295	289	285	277	273	316
85°	79	76	76	73	73	84
90°	1	8	17	20	22	8
95°	44	14	22	27	27	52
105°	214	222	158	30	32	227
115°	402	407	413	420	423	397
125°	567	573	576	577	579	507
135°	706	710	713	715	713	544
145°	815	820	821	823	823	510
155°	897	896	897	900	896	414
165°	946	944	944	949	944	267
175°	969	965	966	971	965	92
180°	969	969	969	969	969	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1761.7	1761.7	1761.7	1761.7	1761.7
2.5°	1769.3	1763.2	1746.6	1761.7	1760.2
5°	1763.2	1755.7	1739.0	1754.2	1751.1
7.5°	1749.6	1742.0	1725.4	1739.0	1737.5
10°	1731.4	1723.9	1704.2	1717.8	1714.8
12.5°	1707.2	1701.1	1683.0	1692.0	1690.5
15°	1678.4	1672.4	1652.7	1664.8	1655.7
17.5°	1646.6	1639.0	1619.3	1628.4	1625.4
20°	1610.2	1601.2	1581.5	1587.5	1583.0
22.5°	1569.3	1560.3	1540.6	1545.1	1539.1
25°	1523.9	1514.8	1495.1	1496.6	1492.1
27.5°	1476.9	1467.9	1446.6	1448.2	1443.6
30°	1425.4	1417.9	1396.7	1396.7	1386.1
32.5°	1373.9	1363.3	1348.2	1337.6	1333.0
35°	1317.9	1308.8	1289.1	1280.0	1272.4
37.5°	1261.8	1249.7	1230.0	1219.4	1214.9
40°	1202.8	1193.7	1172.5	1160.3	1154.3
42.5°	1143.7	1133.1	1111.9	1099.8	1093.7
45°	1080.1	1074.0	1054.3	1036.1	1028.6
47.5°	1018.0	1008.9	990.7	972.5	966.5
50°	954.3	946.8	927.1	910.4	901.3
52.5°	887.7	883.1	861.9	848.3	839.2
55°	819.5	818.0	798.3	781.6	774.1
57.5°	755.9	749.8	734.7	719.5	710.4
60°	686.2	684.7	666.5	652.9	645.3
62.5°	624.1	619.6	601.4	587.7	583.2
65°	559.0	551.4	536.2	524.1	519.6
67.5°	489.3	483.2	471.1	460.5	454.4
70°	427.2	418.1	409.0	398.4	390.8
72.5°	362.0	356.0	345.4	336.3	333.3
75°	295.4	289.3	284.8	277.2	272.7
77.5°	236.3	233.3	227.2	221.2	221.2
80°	178.7	174.2	171.2	169.7	169.7
82.5°	122.7	122.7	122.7	119.7	118.2
85°	78.8	75.7	75.7	72.7	72.7
87.5°	39.4	34.8	33.3	31.8	31.8
90°	0.7	7.9	17.3	20.2	21.6
92.5°	16.6	12.2	18.7	23.7	24.5
95°	43.9	14.4	22.3	27.3	27.3
97.5°	79.9	59.7	23.0	28.8	29.5
100°	121.6	136.0	23.7	29.5	30.2
102.5°	169.1	178.5	53.3	29.5	30.9
105°	214.5	222.4	157.6	30.2	31.7
107.5°	262.7	269.2	279.9	169.1	74.8
110°	310.9	316.7	324.6	300.8	197.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	357.0	362.0	369.9	376.4	374.9
115°	402.3	406.6	413.1	420.3	423.2
117.5°	446.9	451.9	455.5	461.3	462.0
120°	487.9	494.4	496.6	502.3	502.3
122.5°	529.7	534.7	537.6	541.2	541.9
125°	567.1	572.9	575.7	577.2	578.6
127.5°	604.5	610.3	613.9	616.0	614.6
130°	639.1	644.8	647.7	650.6	649.1
132.5°	672.2	677.9	680.1	683.0	680.8
135°	706.0	710.3	713.2	715.3	713.2
137.5°	734.8	740.5	742.0	745.6	744.1
140°	763.6	767.9	770.0	772.9	771.5
142.5°	790.2	794.5	796.7	798.8	796.7
145°	814.7	819.7	821.1	822.6	822.6
147.5°	838.4	842.0	843.4	844.9	841.3
150°	860.0	862.2	863.6	865.0	862.9
152.5°	879.4	880.1	880.9	883.7	880.1
155°	897.4	896.0	896.7	900.3	896.0
157.5°	911.8	911.8	911.1	915.4	909.7
160°	924.8	924.0	923.3	927.6	922.6
162.5°	937.0	934.8	934.1	939.2	934.8
165°	946.4	944.2	943.5	949.2	944.2
167.5°	954.3	951.4	951.4	957.2	951.4
170°	960.8	957.9	957.9	963.6	957.9
172.5°	965.1	961.5	962.2	967.9	961.5
175°	968.7	965.1	965.8	970.8	965.1
177.5°	970.1	966.5	967.2	973.0	965.8
180°	968.7	968.7	968.7	968.7	968.7

(END OF REPORT)