

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: P1032174

Luminaire Tested: S123RDIW-B1165D755UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032174
REPORT IS A COMBINATION OF REPORTS P994156 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D755UB50-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

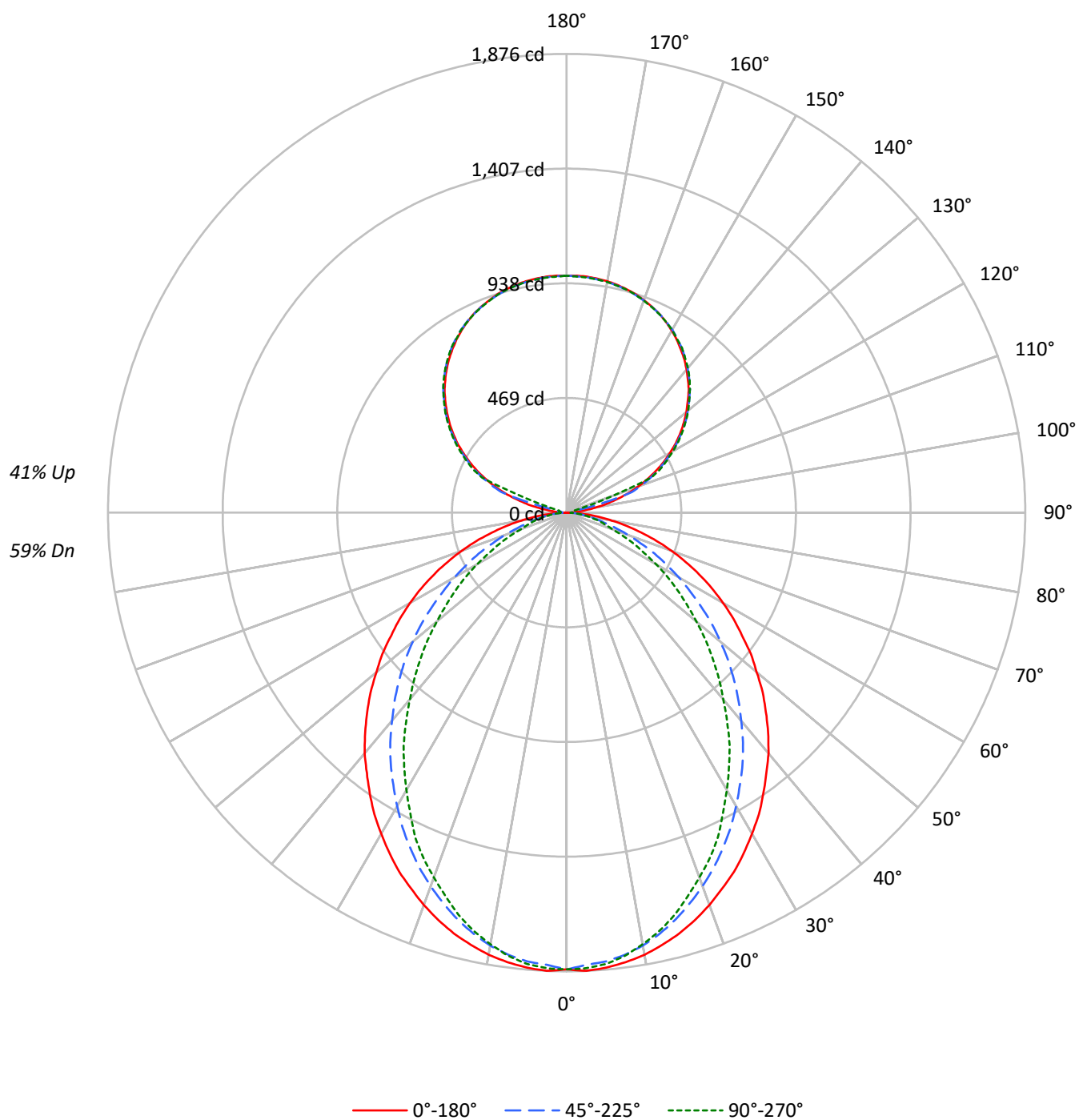
Lumens per Lamp: N/A
Luminaire Lumens: 7175.0 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64
1	100	96	92	89	93	90	86	83	78	76	73	67	66	64	57	56	55
2	92	84	78	73	85	79	74	69	69	65	61	60	57	54	51	49	47
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	46	43	40
4	77	66	58	52	71	62	55	50	54	49	45	47	43	40	41	38	35
5	71	59	51	45	66	56	48	43	49	43	39	43	38	35	37	34	31
6	65	53	45	39	61	50	43	38	44	38	34	39	34	31	34	30	27
7	60	48	40	35	56	45	38	33	40	34	30	35	31	27	31	27	24
8	56	44	36	31	52	41	34	30	37	31	27	33	28	24	28	25	22
9	52	40	33	28	49	38	31	27	34	28	24	30	25	22	26	23	20
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	24	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20106	20106	20106
5°	20139	19395	19343
10°	19980	18665	18298
15°	19721	17764	17154
20°	19381	16784	15875
25°	19030	15765	14664
30°	18581	14682	13231
35°	18116	13618	11928
40°	17681	12462	10487
45°	17122	11332	9191
50°	16505	10124	7851
55°	15865	8832	6623
60°	15255	7507	5376
65°	14465	6147	4195
70°	13473	4649	2999
75°	12043	3148	2376
80°	10282	2187	1667
85°	7713	1181	873

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17122 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.6	2.4
10°-20°	488.5	6.8
20°-30°	703.3	9.8
30°-40°	792.1	11.0
40°-50°	757.6	10.6
50°-60°	620.2	8.6
60°-70°	418.1	5.8
70°-80°	209.7	2.9
80°-90°	56.8	0.8
90°-100°	34.1	0.5
100°-110°	165.2	2.3
110°-120°	404.7	5.6
120°-130°	513.8	7.2
130°-140°	548.9	7.6
140°-150°	513.2	7.2
150°-160°	414.0	5.8
160°-170°	267.2	3.7
170°-180°	92.1	1.3
0°-30°	1367.4	19.1
0°-40°	2159.5	30.1
0°-60°	3537.3	49.3
0°-90°	4221.9	58.8
90°-120°	604.0	8.4
90°-150°	2179.9	30.4
90°-180°	2953.0	41.2
0°-180°	7175.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1868	1868	1868	1868	1868	
5°	1868	1860	1842	1856	1853	177
15°	1782	1765	1722	1715	1704	502
25°	1621	1583	1513	1482	1465	746
35°	1403	1348	1254	1189	1162	878
45°	1153	1085	968	882	845	890
55°	876	801	673	585	554	785
65°	598	515	397	323	306	592
75°	317	244	161	145	142	337
85°	80	47	42	39	39	88
90°	1	8	17	20	22	7
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°	1867.9	1867.9	1867.9	1867.9	1867.9
2.5°	1875.5	1869.5	1851.3	1867.9	1864.9
5°	1867.9	1860.4	1842.2	1855.8	1852.8
7.5°	1854.3	1846.7	1824.0	1833.1	1828.5
10°	1836.1	1825.5	1798.2	1799.8	1792.2
12.5°	1810.4	1798.2	1763.4	1761.9	1752.8
15°	1781.6	1764.9	1722.5	1714.9	1704.3
17.5°	1746.7	1728.6	1675.5	1660.4	1645.2
20°	1707.4	1683.1	1625.5	1605.8	1587.7
22.5°	1663.4	1634.6	1572.5	1546.8	1530.1
25°	1621.0	1583.1	1513.4	1481.6	1465.0
27.5°	1569.5	1528.6	1452.8	1410.4	1384.7
30°	1516.5	1471.0	1386.2	1334.7	1310.4
32.5°	1463.4	1410.4	1319.5	1262.0	1236.2
35°	1402.8	1348.3	1254.4	1189.2	1162.0
37.5°	1342.2	1283.2	1184.7	1112.0	1078.6
40°	1284.7	1218.0	1110.5	1031.7	996.8
42.5°	1219.5	1152.9	1040.8	952.9	922.6
45°	1152.9	1084.7	968.1	881.7	845.3
47.5°	1087.7	1012.0	896.9	802.9	771.1
50°	1015.0	943.8	821.1	727.2	692.3
52.5°	949.9	871.1	749.9	651.4	621.1
55°	875.6	801.4	672.6	584.8	554.5
57.5°	809.0	728.7	598.4	515.1	489.3
60°	739.3	656.0	530.2	448.4	422.7
62.5°	669.6	586.3	460.5	384.8	357.5
65°	598.4	515.1	396.9	322.7	306.0
67.5°	527.2	442.4	327.2	271.2	253.0
70°	457.5	375.7	269.7	216.6	200.0
72.5°	387.8	307.5	213.6	172.7	168.2
75°	316.6	243.9	160.6	145.4	142.4
77.5°	251.5	184.8	125.7	116.7	113.6
80°	189.4	127.3	95.4	90.9	87.9
82.5°	130.3	78.8	68.2	63.6	63.6
85°	80.3	47.0	42.4	39.4	39.4
87.5°	36.4	19.7	19.7	18.2	16.7
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)