

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: P1032138

Luminaire Tested: S123RDIW-B1165D460UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032138
REPORT IS A COMBINATION OF REPORTS P994074 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D460UB27-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

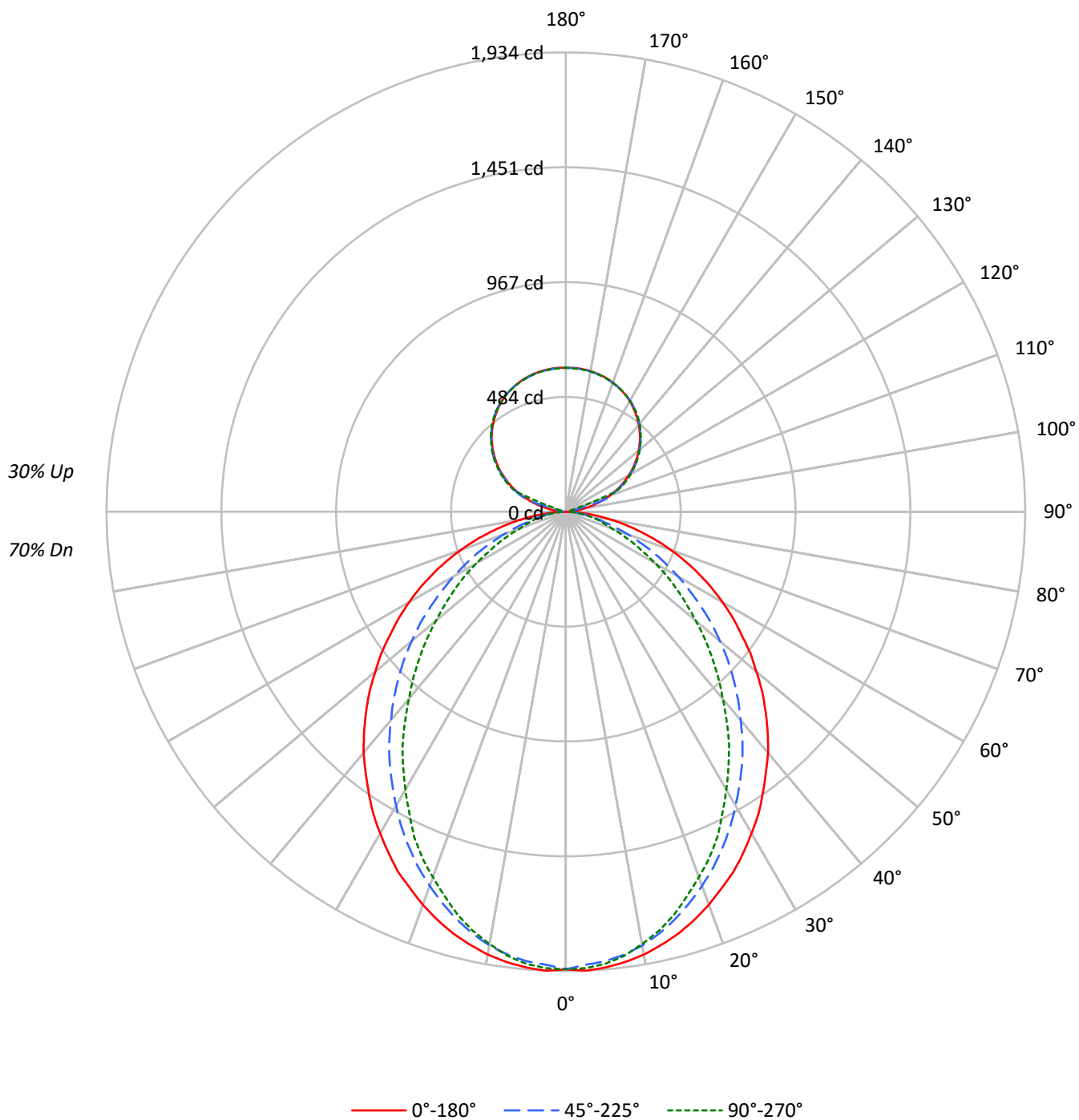
Lumens per Lamp: N/A
Luminaire Lumens: 6200.0 lumens
Efficiency: N/A
Efficacy: 83.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

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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	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75
1	103	99	95	91	97	93	90	87	84	81	79	75	73	71	67	65	64
2	94	87	80	75	89	82	77	72	74	70	66	66	63	60	59	57	55
3	86	77	69	63	81	73	66	61	66	60	56	59	55	51	53	50	47
4	79	68	60	54	75	65	58	52	59	53	48	53	48	45	48	44	41
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	43	39	36
6	67	55	47	41	63	53	45	40	48	42	37	43	38	34	39	35	32
7	62	50	42	36	59	48	40	35	44	37	33	40	34	31	36	32	28
8	58	46	38	32	55	44	36	31	40	34	29	36	31	28	33	29	26
9	54	42	34	29	51	40	33	28	37	31	27	34	29	25	31	26	23
10	51	39	31	26	48	37	30	26	34	28	24	31	26	23	29	24	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20730	20730	20730
5°	20764	19997	19943
10°	20601	19245	18866
15°	20334	18316	17686
20°	19983	17305	16368
25°	19621	16255	15119
30°	19156	15137	13642
35°	18679	14040	12298
40°	18230	12848	10813
45°	17654	11683	9477
50°	17017	10438	8094
55°	16358	9106	6828
60°	15727	7740	5542
65°	14915	6338	4325
70°	13891	4792	3092
75°	12420	3246	2449
80°	10597	2255	1718
85°	7953	1217	900

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17654 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	2.9
10°-20°	503.7	8.1
20°-30°	725.2	11.7
30°-40°	816.6	13.2
40°-50°	781.2	12.6
50°-60°	639.4	10.3
60°-70°	431.1	7.0
70°-80°	216.2	3.5
80°-90°	57.7	0.9
90°-100°	21.4	0.3
100°-110°	103.3	1.7
110°-120°	253.2	4.1
120°-130°	321.5	5.2
130°-140°	343.4	5.5
140°-150°	321.1	5.2
150°-160°	259.0	4.2
160°-170°	167.2	2.7
170°-180°	57.6	0.9
0°-30°	1409.9	22.7
0°-40°	2226.5	35.9
0°-60°	3647.1	58.8
0°-90°	4352.2	70.2
90°-120°	378.0	6.1
90°-150°	1364.0	22.0
90°-180°	1848.0	29.8
0°-180°	6200.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1926	1926	1926	1926	1926	
5°	1926	1918	1899	1913	1910	183
15°	1837	1820	1776	1768	1757	518
25°	1671	1632	1560	1528	1510	769
35°	1446	1390	1293	1226	1198	905
45°	1189	1118	998	909	872	917
55°	903	826	694	603	572	810
65°	617	531	409	333	316	611
75°	326	252	166	150	147	348
85°	83	48	44	41	41	91
90°	0	5	11	13	14	7
95°	28	9	14	17	17	33
105°	134	139	99	19	20	142
115°	252	254	258	263	265	249
125°	355	358	360	361	362	317
135°	442	444	446	448	446	340
145°	510	513	514	515	515	319
155°	562	561	561	563	561	259
165°	592	591	590	594	591	167
175°	606	604	604	608	604	58
180°	606	606	606	606	606	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1925.9	1925.9	1925.9	1925.9	1925.9
2.5°	1933.7	1927.5	1908.7	1925.9	1922.8
5°	1925.9	1918.1	1899.4	1913.4	1910.3
7.5°	1911.9	1904.1	1880.6	1890.0	1885.3
10°	1893.1	1882.2	1854.1	1855.6	1847.8
12.5°	1866.6	1854.1	1818.1	1816.6	1807.2
15°	1836.9	1819.7	1776.0	1768.2	1757.2
17.5°	1801.0	1782.2	1727.6	1711.9	1696.3
20°	1760.4	1735.4	1676.0	1655.7	1637.0
22.5°	1715.1	1685.4	1621.3	1594.8	1577.6
25°	1671.3	1632.3	1560.4	1527.6	1510.4
27.5°	1618.2	1576.0	1497.9	1454.2	1427.7
30°	1563.5	1516.7	1429.2	1376.1	1351.1
32.5°	1508.9	1454.2	1360.5	1301.1	1274.6
35°	1446.4	1390.2	1293.3	1226.2	1198.0
37.5°	1383.9	1323.0	1221.5	1146.5	1112.1
40°	1324.6	1255.8	1144.9	1063.7	1027.8
42.5°	1257.4	1188.7	1073.1	982.5	951.2
45°	1188.7	1118.4	998.1	909.1	871.6
47.5°	1121.5	1043.4	924.7	827.8	795.0
50°	1046.5	973.1	846.6	749.8	713.8
52.5°	979.4	898.1	773.2	671.7	640.4
55°	902.8	826.3	693.5	602.9	571.7
57.5°	834.1	751.3	617.0	531.1	504.5
60°	762.2	676.3	546.7	462.3	435.8
62.5°	690.4	604.5	474.8	396.7	368.6
65°	617.0	531.1	409.2	332.7	315.5
67.5°	543.6	456.1	337.4	279.6	260.9
70°	471.7	387.4	278.0	223.4	206.2
72.5°	399.9	317.1	220.2	178.1	173.4
75°	326.5	251.5	165.6	150.0	146.8
77.5°	259.3	190.6	129.6	120.3	117.1
80°	195.2	131.2	98.4	93.7	90.6
82.5°	134.3	81.2	70.3	65.6	65.6
85°	82.8	48.4	43.7	40.6	40.6
87.5°	37.5	20.3	20.3	18.7	17.2
90°	0.5	5.0	10.8	12.6	13.5
92.5°	10.4	7.7	11.7	14.9	15.3
95°	27.5	9.0	14.0	17.1	17.1
97.5°	50.0	37.4	14.4	18.0	18.5
100°	76.1	85.1	14.9	18.5	18.9
102.5°	105.8	111.7	33.3	18.5	19.4
105°	134.2	139.1	98.6	18.9	19.8
107.5°	164.4	168.4	175.2	105.8	46.8
110°	194.5	198.1	203.1	188.2	123.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	223.4	226.5	231.5	235.5	234.6
115°	251.7	254.4	258.5	263.0	264.8
117.5°	279.6	282.8	285.0	288.6	289.1
120°	305.3	309.4	310.7	314.3	314.3
122.5°	331.4	334.6	336.4	338.6	339.1
125°	354.8	358.4	360.2	361.1	362.0
127.5°	378.3	381.9	384.1	385.5	384.6
130°	399.9	403.5	405.3	407.1	406.2
132.5°	420.6	424.2	425.5	427.3	426.0
135°	441.8	444.5	446.3	447.6	446.3
137.5°	459.8	463.4	464.3	466.5	465.6
140°	477.8	480.5	481.8	483.6	482.7
142.5°	494.4	497.1	498.5	499.8	498.5
145°	509.7	512.9	513.8	514.7	514.7
147.5°	524.6	526.9	527.8	528.7	526.4
150°	538.1	539.5	540.4	541.3	539.9
152.5°	550.3	550.7	551.2	553.0	550.7
155°	561.5	560.6	561.1	563.3	560.6
157.5°	570.5	570.5	570.1	572.8	569.2
160°	578.6	578.2	577.7	580.4	577.3
162.5°	586.3	584.9	584.5	587.7	584.9
165°	592.2	590.8	590.4	594.0	590.8
167.5°	597.1	595.3	595.3	598.9	595.3
170°	601.2	599.4	599.4	603.0	599.4
172.5°	603.9	601.6	602.1	605.7	601.6
175°	606.1	603.9	604.3	607.5	603.9
177.5°	607.0	604.8	605.2	608.8	604.3
180°	606.1	606.1	606.1	606.1	606.1

(END OF REPORT)