

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: P1032158

Luminaire Tested: S123RDIW-B1165D755UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032158
REPORT IS A COMBINATION OF REPORTS P994118 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D755UB27-4F0-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

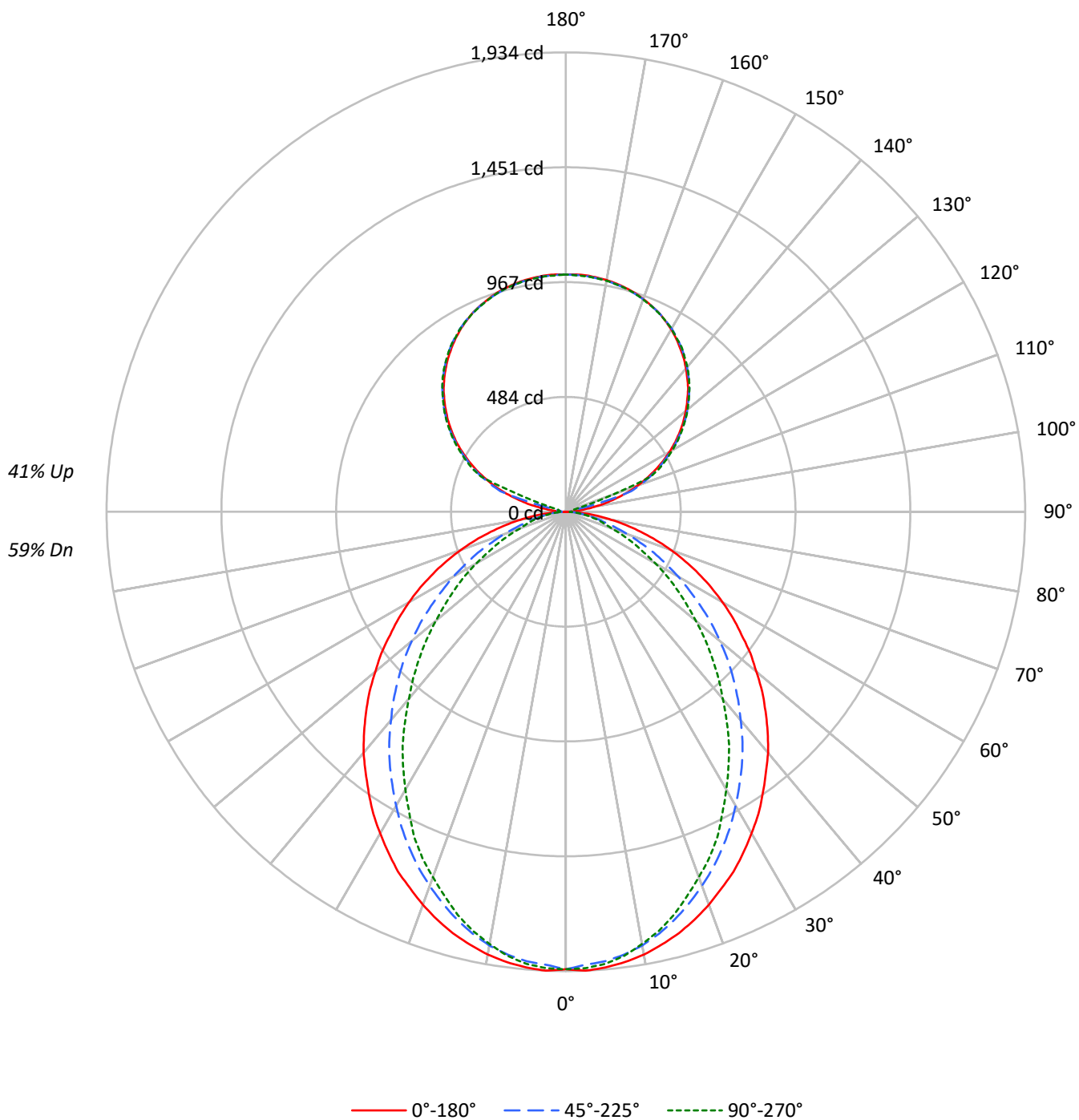
Lumens per Lamp: N/A
Luminaire Lumens: 7398.0 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	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	2.4
10°-20°	503.7	6.8
20°-30°	725.2	9.8
30°-40°	816.6	11.0
40°-50°	781.2	10.6
50°-60°	639.4	8.6
60°-70°	431.1	5.8
70°-80°	216.2	2.9
80°-90°	58.5	0.8
90°-100°	35.2	0.5
100°-110°	170.3	2.3
110°-120°	417.3	5.6
120°-130°	529.8	7.2
130°-140°	565.9	7.6
140°-150°	529.2	7.2
150°-160°	426.9	5.8
160°-170°	275.5	3.7
170°-180°	94.9	1.3
0°-30°	1409.9	19.1
0°-40°	2226.5	30.1
0°-60°	3647.1	49.3
0°-90°	4353.0	58.8
90°-120°	622.8	8.4
90°-150°	2247.8	30.4
90°-180°	3045.0	41.2
0°-180°	7398.0	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°	1	8	18	21	22	8
95°	45	15	23	28	28	54
105°	221	229	162	31	33	234
115°	415	419	426	433	436	410
125°	585	591	594	595	597	522
135°	728	732	735	738	735	560
145°	840	845	847	848	848	526
155°	925	924	925	928	924	426
165°	976	974	973	979	974	276
175°	999	995	996	1001	995	95
180°	999	999	999	999	999	

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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°	0.7	8.2	17.8	20.8	22.3
92.5°	17.1	12.6	19.3	24.5	25.2
95°	45.3	14.8	23.0	28.2	28.2
97.5°	82.4	61.6	23.7	29.7	30.4
100°	125.4	140.3	24.5	30.4	31.2
102.5°	174.4	184.0	54.9	30.4	31.9
105°	221.1	229.3	162.5	31.2	32.7
107.5°	270.9	277.5	288.7	174.4	77.2
110°	320.6	326.5	334.7	310.2	204.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	368.1	373.3	381.4	388.1	386.6
115°	414.8	419.3	425.9	433.4	436.3
117.5°	460.8	466.0	469.7	475.7	476.4
120°	503.1	509.8	512.0	518.0	518.0
122.5°	546.2	551.4	554.3	558.0	558.8
125°	584.8	590.7	593.7	595.1	596.6
127.5°	623.3	629.3	633.0	635.2	633.7
130°	659.0	664.9	667.9	670.8	669.3
132.5°	693.1	699.0	701.3	704.2	702.0
135°	728.0	732.4	735.4	737.6	735.4
137.5°	757.7	763.6	765.1	768.8	767.3
140°	787.3	791.8	794.0	797.0	795.5
142.5°	814.8	819.2	821.5	823.7	821.5
145°	840.0	845.2	846.7	848.2	848.2
147.5°	864.5	868.2	869.7	871.2	867.5
150°	886.8	889.0	890.5	892.0	889.7
152.5°	906.8	907.6	908.3	911.3	907.6
155°	925.4	923.9	924.6	928.3	923.9
157.5°	940.2	940.2	939.5	943.9	938.0
160°	953.6	952.8	952.1	956.5	951.3
162.5°	966.2	963.9	963.2	968.4	963.9
165°	975.8	973.6	972.9	978.8	973.6
167.5°	984.0	981.0	981.0	987.0	981.0
170°	990.7	987.7	987.7	993.6	987.7
172.5°	995.1	991.4	992.1	998.1	991.4
175°	998.8	995.1	995.9	1001.1	995.1
177.5°	1000.3	996.6	997.3	1003.3	995.9
180°	998.8	998.8	998.8	998.8	998.8

(END OF REPORT)