

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: P1031109

Luminaire Tested: S123RDIW-B1165D755UB2750-4F0-XX-W2A-F1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031109
REPORT IS A COMBINATION OF REPORTS P994128 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D755UB2750-4F0-XX-W2A-F1_5000K
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

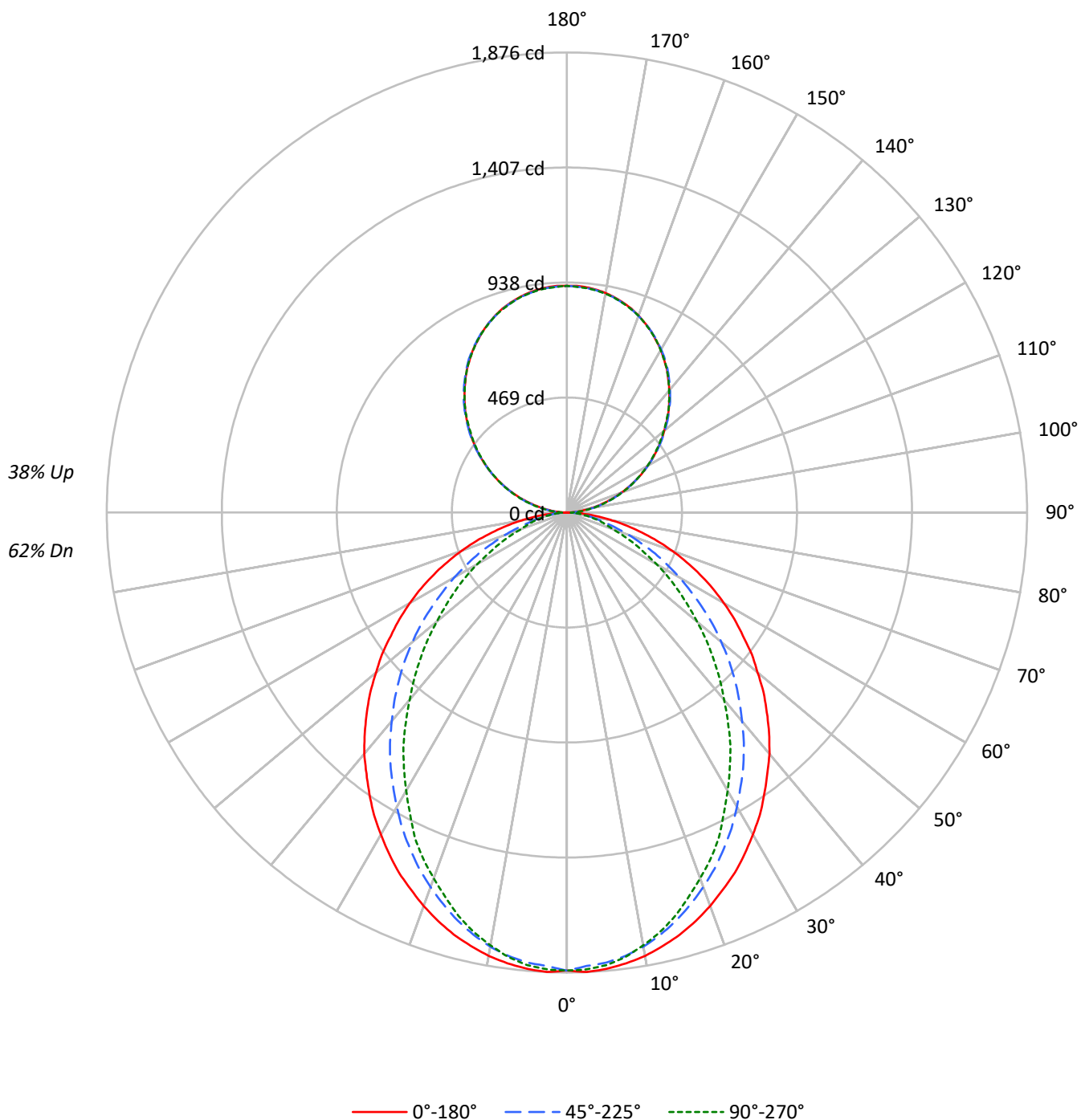
Lumens per Lamp: N/A
Luminaire Lumens: 6783.0 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	101	97	93	89	94	91	87	84	80	77	75	70	68	66	60	59	58
2	92	85	79	74	86	80	75	70	70	66	63	62	59	56	53	51	49
3	84	75	68	62	79	71	64	59	62	57	53	55	51	48	48	45	42
4	77	67	59	53	72	63	56	50	56	50	46	49	45	41	43	40	37
5	71	60	52	46	67	56	49	44	50	44	40	44	40	36	39	35	32
6	66	54	46	40	62	51	44	38	45	39	35	40	35	32	35	32	29
7	61	49	41	35	57	46	39	34	41	35	31	37	32	28	32	29	26
8	57	44	37	31	53	42	35	30	38	32	28	34	29	25	30	26	23
9	53	41	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21
10	50	37	30	25	47	36	29	24	32	26	23	29	24	21	26	22	19

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	2.6
10°-20°	488.5	7.2
20°-30°	703.3	10.4
30°-40°	792.1	11.7
40°-50°	757.6	11.2
50°-60°	620.2	9.1
60°-70°	418.1	6.2
70°-80°	209.7	3.1
80°-90°	56.8	0.8
90°-100°	59.5	0.9
100°-110°	180.1	2.7
110°-120°	306.6	4.5
120°-130°	403.3	5.9
130°-140°	453.4	6.7
140°-150°	445.7	6.6
150°-160°	375.2	5.5
160°-170°	249.8	3.7
170°-180°	87.5	1.3
0°-30°	1367.4	20.2
0°-40°	2159.5	31.8
0°-60°	3537.3	52.1
0°-90°	4221.9	62.2
90°-120°	546.2	8.1
90°-150°	1848.5	27.3
90°-180°	2561.0	37.8
0°-180°	6783.0	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	8
95°	43	48	54	57	57	47
105°	163	165	171	171	173	175
115°	309	311	309	310	309	305
125°	452	454	452	449	446	403
135°	586	590	590	587	585	451
145°	711	712	714	714	711	444
155°	814	814	815	818	812	375
165°	886	884	884	889	884	250
175°	922	919	919	924	918	88
180°	924	924	924	924	924	

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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	8.0	17.4	20.3	21.8
92.5°	21.8	26.1	30.5	32.7	31.2
95°	42.8	47.9	53.7	56.6	56.6
97.5°	70.4	74.1	78.4	82.0	81.3
100°	98.7	103.1	106.7	108.9	110.4
102.5°	131.4	133.6	138.7	140.9	140.1
105°	163.4	164.8	171.4	171.4	172.8
107.5°	201.1	201.8	204.8	206.9	206.2
110°	236.0	237.4	238.9	241.8	240.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	272.3	273.0	273.0	276.6	276.6
115°	308.6	310.8	309.3	310.0	309.3
117.5°	345.6	346.3	344.9	344.9	342.7
120°	379.7	384.1	380.5	379.7	378.3
122.5°	415.3	418.2	416.8	414.6	412.4
125°	451.6	453.8	452.3	449.4	446.5
127.5°	485.0	489.4	487.9	483.6	480.7
130°	518.4	524.2	522.0	519.1	514.1
132.5°	551.8	557.6	556.2	552.5	548.9
135°	585.9	590.3	589.6	586.7	585.2
137.5°	617.2	620.8	623.0	619.3	617.2
140°	649.8	653.5	654.2	653.5	648.4
142.5°	679.6	683.2	684.7	684.0	680.3
145°	710.8	712.3	714.5	713.7	710.8
147.5°	737.7	740.6	742.8	742.8	738.4
150°	766.0	767.5	768.9	768.9	764.6
152.5°	789.2	791.4	792.1	793.6	790.0
155°	813.9	813.9	814.7	817.6	812.5
157.5°	835.0	834.3	835.0	837.9	833.5
160°	854.6	853.1	853.1	856.8	853.9
162.5°	872.0	869.8	870.6	874.2	869.1
165°	886.5	884.4	884.4	888.7	883.6
167.5°	898.9	896.0	896.7	901.1	896.7
170°	909.0	906.1	906.1	911.2	906.1
172.5°	917.0	914.1	914.1	918.5	913.4
175°	922.1	919.2	919.2	923.6	918.5
177.5°	925.0	922.1	922.1	926.5	921.4
180°	924.3	924.3	924.3	924.3	924.3

(END OF REPORT)