

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: P1031101

Luminaire Tested: S123RDIW-B1165D460UB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031101
REPORT IS A COMBINATION OF REPORTS P994087 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D460UB2750-4F0-XX-W2A-F_3000K
Description: Define 3 Regressed Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

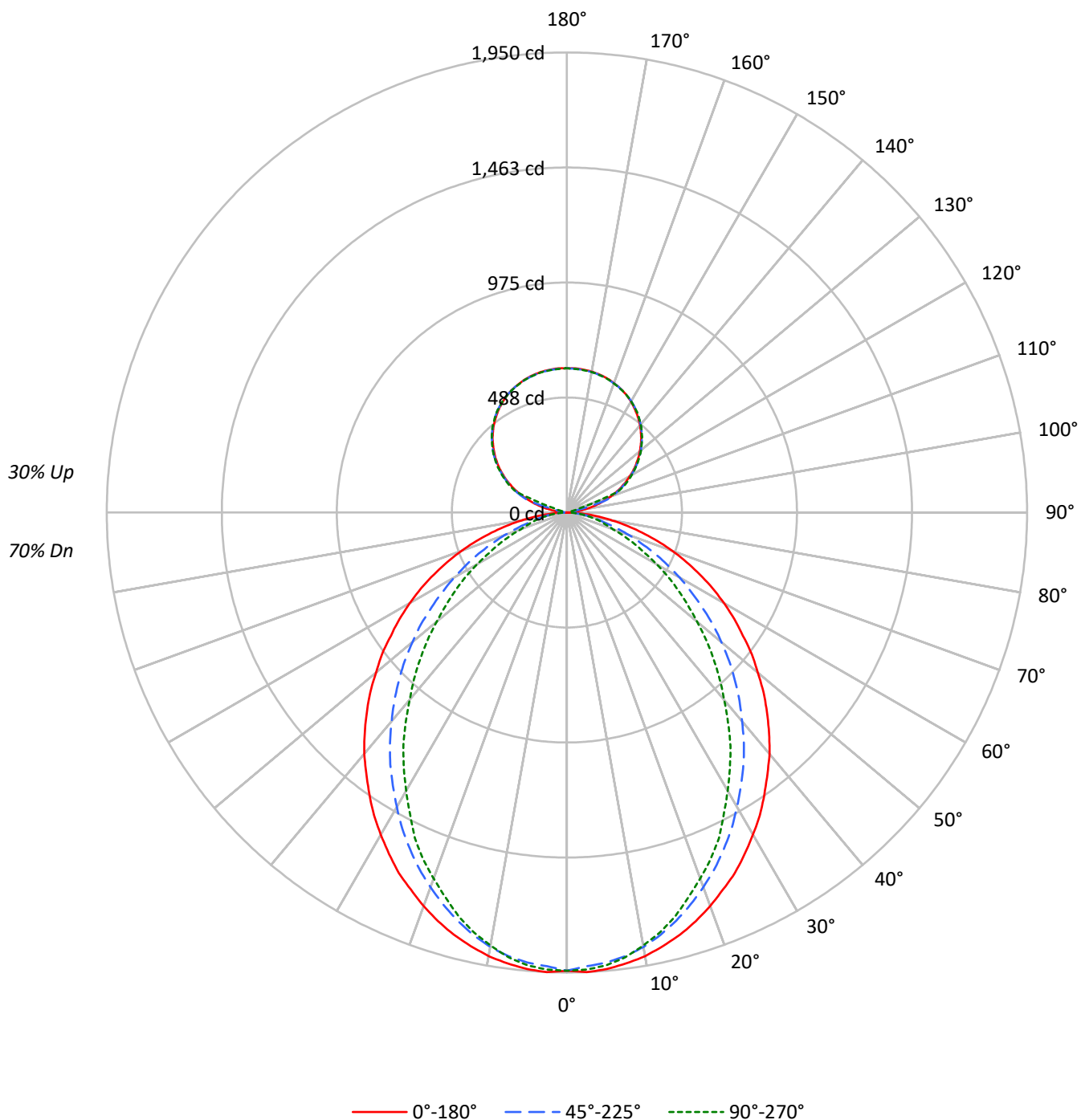
Lumens per Lamp: N/A
Luminaire Lumens: 6253.0 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

TEST NUMBER: P1031101

CATALOG NUMBER: S123RDIW-B1165D460UB2750-4F0-XX-W2A-F_3000K

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	50	30	10
RCR																				
0	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	75	75	75
1	103	99	95	91	97	93	90	87	84	81	79	75	73	71	67	65	64	64	64	60
2	94	87	80	75	89	82	77	72	74	70	66	66	63	60	59	57	55	55	55	51
3	86	77	69	63	81	73	66	61	66	60	56	59	55	51	53	50	47	47	47	44
4	79	68	60	54	75	65	58	52	59	53	48	53	48	45	48	44	41	41	41	38
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	43	39	36	36	36	33
6	67	55	47	41	63	53	45	40	48	42	37	43	38	34	39	35	32	32	32	29
7	62	50	42	36	59	48	40	35	44	37	33	40	34	31	36	32	28	28	28	26
8	58	46	38	32	55	44	36	31	40	34	29	36	31	28	33	29	26	26	26	24
9	54	42	34	29	51	40	33	28	37	31	27	34	29	25	31	26	23	23	23	21
10	51	39	31	26	48	37	30	26	34	28	24	31	26	23	29	24	21	21	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20907	20907	20907
5°	20941	20167	20112
10°	20776	19408	19026
15°	20506	18472	17837
20°	20152	17453	16507
25°	19787	16393	15248
30°	19319	15266	13759
35°	18838	14159	12402
40°	18384	12958	10904
45°	17804	11782	9558
50°	17162	10527	8164
55°	16498	9184	6885
60°	15862	7805	5589
65°	15041	6392	4362
70°	14009	4834	3117
75°	12523	3274	2471
80°	10690	2274	1733
85°	8021	1228	909

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17804 cd/sqm

TEST NUMBER: P1031101

CATALOG NUMBER: S123RDIW-B1165D460UB2750-4F0-XX-W2A-F_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.6	2.9
10°-20°	507.9	8.1
20°-30°	731.3	11.7
30°-40°	823.6	13.2
40°-50°	787.8	12.6
50°-60°	644.9	10.3
60°-70°	434.8	7.0
70°-80°	218.1	3.5
80°-90°	58.2	0.9
90°-100°	21.6	0.3
100°-110°	104.2	1.7
110°-120°	255.4	4.1
120°-130°	324.3	5.2
130°-140°	346.4	5.5
140°-150°	323.9	5.2
150°-160°	261.3	4.2
160°-170°	168.6	2.7
170°-180°	58.1	0.9
0°-30°	1421.8	22.7
0°-40°	2245.4	35.9
0°-60°	3678.1	58.8
0°-90°	4389.2	70.2
90°-120°	381.2	6.1
90°-150°	1375.8	22.0
90°-180°	1864.0	29.8
0°-180°	6253.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1942	1942	1942	1942	1942	
5°	1942	1934	1916	1930	1926	184
15°	1852	1835	1791	1783	1772	522
25°	1686	1646	1574	1541	1523	775
35°	1459	1402	1304	1237	1208	913
45°	1199	1128	1007	917	879	925
55°	910	833	699	608	576	817
65°	622	536	413	336	318	616
75°	329	254	167	151	148	351
85°	84	49	44	41	41	91
90°	0	5	11	13	14	7
95°	28	9	14	17	17	33
105°	135	140	100	19	20	144
115°	254	257	261	265	267	251
125°	358	362	363	364	365	320
135°	446	448	450	452	450	343
145°	514	517	518	519	519	322
155°	566	566	566	568	566	261
165°	597	596	596	599	596	169
175°	611	609	610	613	609	58
180°	611	611	611	611	611	

TEST NUMBER: P1031101

CATALOG NUMBER: S123RDIW-B1165D460UB2750-4F0-XX-W2A-F_3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1942.3	1942.3	1942.3	1942.3	1942.3
2.5°	1950.2	1943.9	1925.0	1942.3	1939.1
5°	1942.3	1934.4	1915.5	1929.7	1926.5
7.5°	1928.1	1920.2	1896.6	1906.1	1901.3
10°	1909.2	1898.2	1869.8	1871.4	1863.5
12.5°	1882.4	1869.8	1833.6	1832.0	1822.6
15°	1852.5	1835.2	1791.1	1783.2	1772.2
17.5°	1816.3	1797.4	1742.2	1726.5	1710.7
20°	1775.3	1750.1	1690.3	1669.8	1650.9
22.5°	1729.6	1699.7	1635.1	1608.3	1591.0
25°	1685.5	1646.2	1573.7	1540.6	1523.3
27.5°	1632.0	1589.4	1510.7	1466.6	1439.8
30°	1576.8	1529.6	1441.4	1387.8	1362.6
32.5°	1521.7	1466.6	1372.1	1312.2	1285.4
35°	1458.7	1402.0	1304.3	1236.6	1208.2
37.5°	1395.7	1334.2	1231.9	1156.2	1121.6
40°	1335.8	1266.5	1154.7	1072.8	1036.5
42.5°	1268.1	1198.8	1082.2	990.8	959.3
45°	1198.8	1127.9	1006.6	916.8	879.0
47.5°	1131.0	1052.3	932.6	834.9	801.8
50°	1055.4	981.4	853.8	756.1	719.9
52.5°	987.7	905.8	779.8	677.4	645.9
55°	910.5	833.3	699.4	608.1	576.5
57.5°	841.2	757.7	622.2	535.6	508.8
60°	768.7	682.1	551.3	466.3	439.5
62.5°	696.3	609.6	478.9	400.1	371.8
65°	622.2	535.6	412.7	335.5	318.2
67.5°	548.2	460.0	340.3	282.0	263.1
70°	475.7	390.7	280.4	225.3	207.9
72.5°	403.3	319.8	222.1	179.6	174.9
75°	329.2	253.6	167.0	151.2	148.1
77.5°	261.5	192.2	130.7	121.3	118.1
80°	196.9	132.3	99.2	94.5	91.4
82.5°	135.5	81.9	70.9	66.2	66.2
85°	83.5	48.8	44.1	41.0	41.0
87.5°	37.8	20.5	20.5	18.9	17.3
90°	0.5	5.0	10.9	12.7	13.6
92.5°	10.4	7.7	11.8	15.0	15.4
95°	27.7	9.1	14.1	17.3	17.3
97.5°	50.4	37.7	14.5	18.2	18.6
100°	76.8	85.8	15.0	18.6	19.1
102.5°	106.7	112.6	33.6	18.6	19.5
105°	135.4	140.3	99.5	19.1	20.0
107.5°	165.8	169.9	176.7	106.7	47.2
110°	196.2	199.8	204.8	189.9	124.9



TEST NUMBER: P1031101

CATALOG NUMBER: S123RDIW-B1165D460UB2750-4F0-XX-W2A-F_3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.3	228.5	233.5	237.5	236.6
115°	253.9	256.6	260.7	265.3	267.1
117.5°	282.1	285.2	287.5	291.1	291.6
120°	308.0	312.0	313.4	317.0	317.0
122.5°	334.3	337.5	339.3	341.6	342.0
125°	357.9	361.5	363.4	364.3	365.2
127.5°	381.5	385.2	387.4	388.8	387.9
130°	403.3	407.0	408.8	410.6	409.7
132.5°	424.2	427.9	429.2	431.0	429.7
135°	445.6	448.3	450.1	451.5	450.1
137.5°	463.7	467.4	468.3	470.6	469.6
140°	481.9	484.6	486.0	487.8	486.9
142.5°	498.7	501.4	502.8	504.2	502.8
145°	514.2	517.3	518.2	519.2	519.2
147.5°	529.1	531.4	532.3	533.2	531.0
150°	542.8	544.1	545.0	546.0	544.6
152.5°	555.0	555.5	555.9	557.8	555.5
155°	566.4	565.5	565.9	568.2	565.5
157.5°	575.5	575.5	575.0	577.7	574.1
160°	583.7	583.2	582.7	585.5	582.3
162.5°	591.4	590.0	589.6	592.7	590.0
165°	597.3	595.9	595.5	599.1	595.9
167.5°	602.3	600.5	600.5	604.1	600.5
170°	606.4	604.5	604.5	608.2	604.5
172.5°	609.1	606.8	607.3	610.9	606.8
175°	611.4	609.1	609.5	612.7	609.1
177.5°	612.3	610.0	610.5	614.1	609.5
180°	611.4	611.4	611.4	611.4	611.4

(END OF REPORT)