

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: P1031102

Luminaire Tested: S123RDIW-B1165D460UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031102
REPORT IS A COMBINATION OF REPORTS P994088 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_3500K
Description: Define 3 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

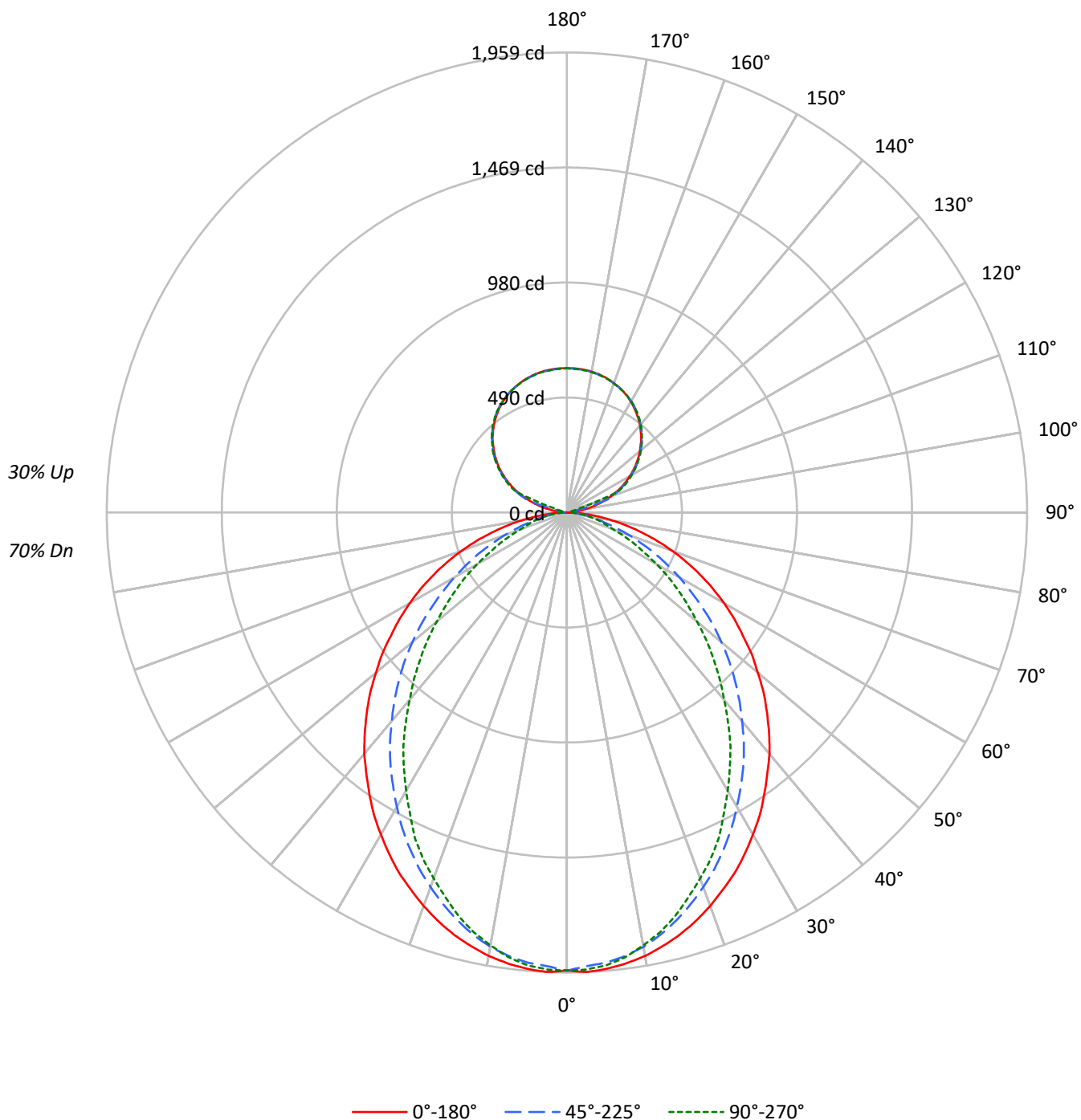
Lumens per Lamp: N/A
Luminaire Lumens: 6280.0 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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				0
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°	20997	20997	20997
5°	21031	20254	20200
10°	20866	19492	19109
15°	20595	18551	17913
20°	20240	17528	16578
25°	19873	16464	15314
30°	19404	15332	13818
35°	18919	14221	12457
40°	18464	13014	10952
45°	17881	11834	9599
50°	17237	10573	8199
55°	16568	9223	6915
60°	15932	7839	5613
65°	15106	6420	4382
70°	14071	4854	3131
75°	12580	3287	2481
80°	10738	2285	1741
85°	8059	1234	911

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.4	2.9
10°-20°	510.1	8.1
20°-30°	734.5	11.7
30°-40°	827.2	13.2
40°-50°	791.2	12.6
50°-60°	647.7	10.3
60°-70°	436.7	7.0
70°-80°	219.0	3.5
80°-90°	58.5	0.9
90°-100°	21.7	0.3
100°-110°	104.7	1.7
110°-120°	256.5	4.1
120°-130°	325.6	5.2
130°-140°	347.9	5.5
140°-150°	325.3	5.2
150°-160°	262.4	4.2
160°-170°	169.3	2.7
170°-180°	58.4	0.9
0°-30°	1428.0	22.7
0°-40°	2255.2	35.9
0°-60°	3694.0	58.8
0°-90°	4408.2	70.2
90°-120°	382.9	6.1
90°-150°	1381.7	22.0
90°-180°	1872.0	29.8
0°-180°	6280.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1951	1951	1951	1951	1951	
5°	1951	1943	1924	1938	1935	185
15°	1860	1843	1799	1791	1780	524
25°	1693	1653	1580	1547	1530	779
35°	1465	1408	1310	1242	1214	917
45°	1204	1133	1011	921	883	929
55°	914	837	702	611	579	820
65°	625	538	414	337	320	618
75°	331	255	168	152	149	352
85°	84	49	44	41	41	92
90°	0	5	11	13	14	7
95°	28	9	14	17	17	33
105°	136	141	100	19	20	144
115°	255	258	262	266	268	252
125°	359	363	365	366	367	321
135°	448	450	452	453	452	345
145°	516	520	520	521	521	323
155°	569	568	568	571	568	262
165°	600	598	598	602	598	169
175°	614	612	612	615	612	58
180°	614	614	614	614	614	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1950.7	1950.7	1950.7	1950.7	1950.7
2.5°	1958.6	1952.3	1933.3	1950.7	1947.5
5°	1950.7	1942.8	1923.8	1938.1	1934.9
7.5°	1936.5	1928.6	1904.8	1914.3	1909.6
10°	1917.5	1906.4	1877.9	1879.5	1871.6
12.5°	1890.6	1877.9	1841.5	1840.0	1830.5
15°	1860.5	1843.1	1798.8	1790.9	1779.8
17.5°	1824.1	1805.2	1749.8	1734.0	1718.1
20°	1783.0	1757.7	1697.6	1677.0	1658.0
22.5°	1737.1	1707.1	1642.2	1615.3	1597.9
25°	1692.8	1653.3	1580.5	1547.3	1529.9
27.5°	1639.0	1596.3	1517.2	1472.9	1446.0
30°	1583.7	1536.2	1447.6	1393.8	1368.5
32.5°	1528.3	1472.9	1378.0	1317.9	1291.0
35°	1465.0	1408.1	1310.0	1241.9	1213.5
37.5°	1401.7	1340.0	1237.2	1161.2	1126.4
40°	1341.6	1272.0	1159.7	1077.4	1041.0
42.5°	1273.6	1204.0	1086.9	995.1	963.5
45°	1204.0	1132.8	1011.0	920.8	882.8
47.5°	1135.9	1056.8	936.6	838.5	805.3
50°	1060.0	985.6	857.5	759.4	723.0
52.5°	992.0	909.7	783.1	680.3	648.7
55°	914.4	836.9	702.4	610.7	579.0
57.5°	844.8	761.0	624.9	537.9	511.0
60°	772.1	685.0	553.7	468.3	441.4
62.5°	699.3	612.3	481.0	401.8	373.4
65°	624.9	537.9	414.5	337.0	319.6
67.5°	550.6	462.0	341.7	283.2	264.2
70°	477.8	392.4	281.6	226.2	208.8
72.5°	405.0	321.2	223.1	180.4	175.6
75°	330.7	254.7	167.7	151.9	148.7
77.5°	262.6	193.0	131.3	121.8	118.7
80°	197.8	132.9	99.7	94.9	91.8
82.5°	136.1	82.3	71.2	66.4	66.4
85°	83.9	49.0	44.3	41.1	41.1
87.5°	38.0	20.6	20.6	19.0	17.4
90°	0.5	5.0	10.9	12.8	13.7
92.5°	10.5	7.8	11.9	15.1	15.5
95°	27.8	9.1	14.1	17.3	17.3
97.5°	50.6	37.9	14.6	18.2	18.7
100°	77.1	86.2	15.1	18.7	19.2
102.5°	107.2	113.1	33.8	18.7	19.6
105°	135.9	141.0	99.9	19.2	20.1
107.5°	166.5	170.6	177.4	107.2	47.4
110°	197.1	200.7	205.7	190.7	125.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	226.3	229.4	234.5	238.6	237.7
115°	255.0	257.7	261.8	266.4	268.2
117.5°	283.3	286.5	288.7	292.4	292.8
120°	309.3	313.4	314.7	318.4	318.4
122.5°	335.7	338.9	340.7	343.0	343.5
125°	359.4	363.1	364.9	365.8	366.7
127.5°	383.2	386.8	389.1	390.5	389.6
130°	405.1	408.7	410.5	412.4	411.4
132.5°	426.0	429.7	431.1	432.9	431.5
135°	447.5	450.2	452.0	453.4	452.0
137.5°	465.7	469.4	470.3	472.6	471.7
140°	484.0	486.7	488.1	489.9	489.0
142.5°	500.9	503.6	505.0	506.3	505.0
145°	516.4	519.6	520.5	521.4	521.4
147.5°	531.4	533.7	534.6	535.5	533.2
150°	545.1	546.5	547.4	548.3	546.9
152.5°	557.4	557.9	558.3	560.2	557.9
155°	568.8	567.9	568.4	570.6	567.9
157.5°	577.9	577.9	577.5	580.2	576.6
160°	586.2	585.7	585.2	588.0	584.8
162.5°	593.9	592.5	592.1	595.3	592.5
165°	599.8	598.5	598.0	601.7	598.5
167.5°	604.9	603.0	603.0	606.7	603.0
170°	609.0	607.1	607.1	610.8	607.1
172.5°	611.7	609.4	609.9	613.5	609.4
175°	614.0	611.7	612.2	615.3	611.7
177.5°	614.9	612.6	613.1	616.7	612.2
180°	614.0	614.0	614.0	614.0	614.0

(END OF REPORT)