

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: P1032151

Luminaire Tested: S123RDIW-B1165D460UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032151
REPORT IS A COMBINATION OF REPORTS P994107 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D460UB40-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

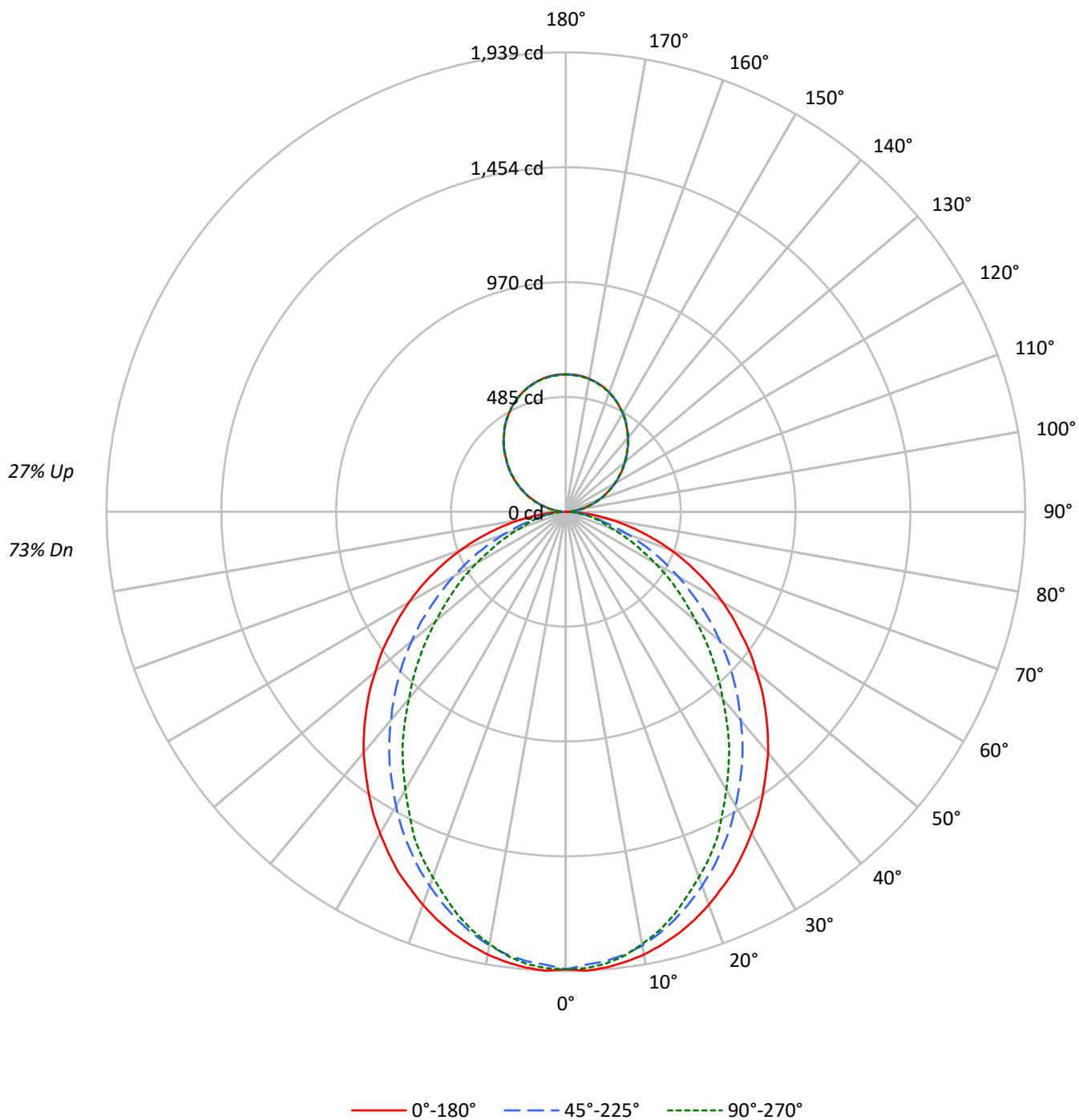
Lumens per Lamp: N/A
Luminaire Lumens: 5971.0 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77
1	103	99	95	92	98	94	91	88	85	83	80	77	75	73	69	68	66
2	95	87	81	76	90	83	78	73	75	71	67	68	65	62	61	59	57
3	87	77	70	64	82	74	67	62	67	61	57	61	56	53	55	52	49
4	80	69	61	55	75	66	58	53	60	54	49	54	50	46	49	46	42
5	73	62	53	47	69	59	51	46	54	48	43	49	44	40	45	41	37
6	68	55	47	41	64	53	46	40	49	42	38	45	39	35	41	36	33
7	63	50	42	37	60	48	41	36	44	38	34	41	35	31	37	33	30
8	59	46	38	33	56	44	37	32	41	34	30	37	32	28	34	30	27
9	55	42	35	29	52	41	33	29	37	31	27	35	29	26	32	27	24
10	51	39	32	27	49	37	31	26	35	29	25	32	27	23	30	25	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20787	20787	20787
5°	20821	20052	19998
10°	20657	19298	18918
15°	20390	18367	17735
20°	20038	17353	16413
25°	19675	16299	15161
30°	19210	15180	13680
35°	18731	14079	12332
40°	18279	12884	10842
45°	17701	11715	9503
50°	17064	10467	8117
55°	16403	9131	6847
60°	15771	7762	5557
65°	14956	6356	4338
70°	13929	4806	3101
75°	12454	3254	2456
80°	10630	2262	1722
85°	7973	1222	902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17701 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	3.0
10°-20°	505.0	8.5
20°-30°	727.2	12.2
30°-40°	818.9	13.7
40°-50°	783.3	13.1
50°-60°	641.2	10.7
60°-70°	432.3	7.2
70°-80°	216.8	3.6
80°-90°	57.9	1.0
90°-100°	37.3	0.6
100°-110°	113.0	1.9
110°-120°	192.4	3.2
120°-130°	253.0	4.2
130°-140°	284.4	4.8
140°-150°	279.6	4.7
150°-160°	235.4	3.9
160°-170°	156.7	2.6
170°-180°	54.9	0.9
0°-30°	1413.8	23.7
0°-40°	2232.6	37.4
0°-60°	3657.2	61.2
0°-90°	4364.2	73.1
90°-120°	342.7	5.7
90°-150°	1159.8	19.4
90°-180°	1607.0	26.9
0°-180°	5971.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1931	1931	1931	1931	1931	
5°	1931	1923	1905	1919	1916	183
15°	1842	1825	1781	1773	1762	519
25°	1676	1637	1565	1532	1515	771
35°	1450	1394	1297	1230	1201	908
45°	1192	1122	1001	912	874	920
55°	905	829	695	605	573	812
65°	619	532	410	334	316	612
75°	327	252	166	150	147	349
85°	83	49	44	41	41	91
90°	0	5	11	13	14	7
95°	27	30	34	36	36	30
105°	102	103	108	108	108	110
115°	194	195	194	194	194	192
125°	283	285	284	282	280	253
135°	368	370	370	368	367	283
145°	446	447	448	448	446	279
155°	511	511	511	513	510	235
165°	556	555	555	558	554	157
175°	578	577	577	579	576	55
180°	580	580	580	580	580	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1931.2	1931.2	1931.2	1931.2	1931.2
2.5°	1939.1	1932.8	1914.0	1931.2	1928.1
5°	1931.2	1923.4	1904.6	1918.7	1915.6
7.5°	1917.1	1909.3	1885.8	1895.2	1890.5
10°	1898.3	1887.4	1859.2	1860.8	1852.9
12.5°	1871.7	1859.2	1823.2	1821.6	1812.2
15°	1842.0	1824.7	1780.9	1773.0	1762.1
17.5°	1805.9	1787.1	1732.3	1716.7	1701.0
20°	1765.2	1740.1	1680.6	1660.3	1641.5
22.5°	1719.8	1690.0	1625.8	1599.2	1582.0
25°	1675.9	1636.8	1564.7	1531.8	1514.6
27.5°	1622.7	1580.4	1502.1	1458.2	1431.6
30°	1567.9	1520.9	1433.2	1379.9	1354.8
32.5°	1513.0	1458.2	1364.2	1304.7	1278.1
35°	1450.4	1394.0	1296.9	1229.5	1201.3
37.5°	1387.7	1326.6	1224.8	1149.7	1115.2
40°	1328.2	1259.3	1148.1	1066.6	1030.6
42.5°	1260.9	1191.9	1076.0	985.2	953.9
45°	1191.9	1121.5	1000.9	911.6	874.0
47.5°	1124.6	1046.3	927.2	830.1	797.2
50°	1049.4	975.8	848.9	751.8	715.8
52.5°	982.1	900.6	775.3	673.5	642.2
55°	905.3	828.6	695.4	604.6	573.3
57.5°	836.4	753.4	618.7	532.5	505.9
60°	764.3	678.2	548.2	463.6	437.0
62.5°	692.3	606.2	476.2	397.8	369.6
65°	618.7	532.5	410.4	333.6	316.4
67.5°	545.1	457.4	338.3	280.4	261.6
70°	473.0	388.4	278.8	224.0	206.8
72.5°	401.0	318.0	220.8	178.6	173.9
75°	327.4	252.2	166.0	150.4	147.2
77.5°	260.0	191.1	130.0	120.6	117.5
80°	195.8	131.6	98.7	94.0	90.8
82.5°	134.7	81.4	70.5	65.8	65.8
85°	83.0	48.6	43.9	40.7	40.7
87.5°	37.6	20.4	20.4	18.8	17.2
90°	0.5	5.0	10.9	12.8	13.7
92.5°	13.7	16.4	19.1	20.5	19.6
95°	26.9	30.1	33.7	35.5	35.5
97.5°	44.2	46.5	49.2	51.5	51.0
100°	62.0	64.7	67.0	68.3	69.2
102.5°	82.5	83.8	87.0	88.4	87.9
105°	102.5	103.4	107.5	107.5	108.4
107.5°	126.2	126.6	128.5	129.8	129.4
110°	148.0	149.0	149.9	151.7	150.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.8	171.3	171.3	173.6	173.6
115°	193.6	195.0	194.1	194.5	194.1
117.5°	216.8	217.3	216.4	216.4	215.0
120°	238.2	241.0	238.7	238.2	237.3
122.5°	260.6	262.4	261.5	260.1	258.7
125°	283.3	284.7	283.8	282.0	280.2
127.5°	304.3	307.0	306.1	303.4	301.6
130°	325.2	328.9	327.5	325.7	322.5
132.5°	346.2	349.8	348.9	346.7	344.4
135°	367.6	370.3	369.9	368.1	367.2
137.5°	387.2	389.5	390.8	388.6	387.2
140°	407.7	410.0	410.4	410.0	406.8
142.5°	426.4	428.7	429.6	429.1	426.8
145°	446.0	446.9	448.2	447.8	446.0
147.5°	462.8	464.6	466.0	466.0	463.3
150°	480.6	481.5	482.4	482.4	479.7
152.5°	495.2	496.5	497.0	497.9	495.6
155°	510.7	510.7	511.1	512.9	509.7
157.5°	523.9	523.4	523.9	525.7	523.0
160°	536.2	535.2	535.2	537.5	535.7
162.5°	547.1	545.7	546.2	548.5	545.3
165°	556.2	554.8	554.8	557.6	554.4
167.5°	563.9	562.1	562.6	565.3	562.6
170°	570.3	568.5	568.5	571.7	568.5
172.5°	575.3	573.5	573.5	576.2	573.1
175°	578.5	576.7	576.7	579.4	576.2
177.5°	580.3	578.5	578.5	581.3	578.1
180°	579.9	579.9	579.9	579.9	579.9

(END OF REPORT)