

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: P1032112

Luminaire Tested: S123RDIW-B1165D1320UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032112
REPORT IS A COMBINATION OF REPORTS P994018 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D1320UB40-4F0-XX-W2A-F
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

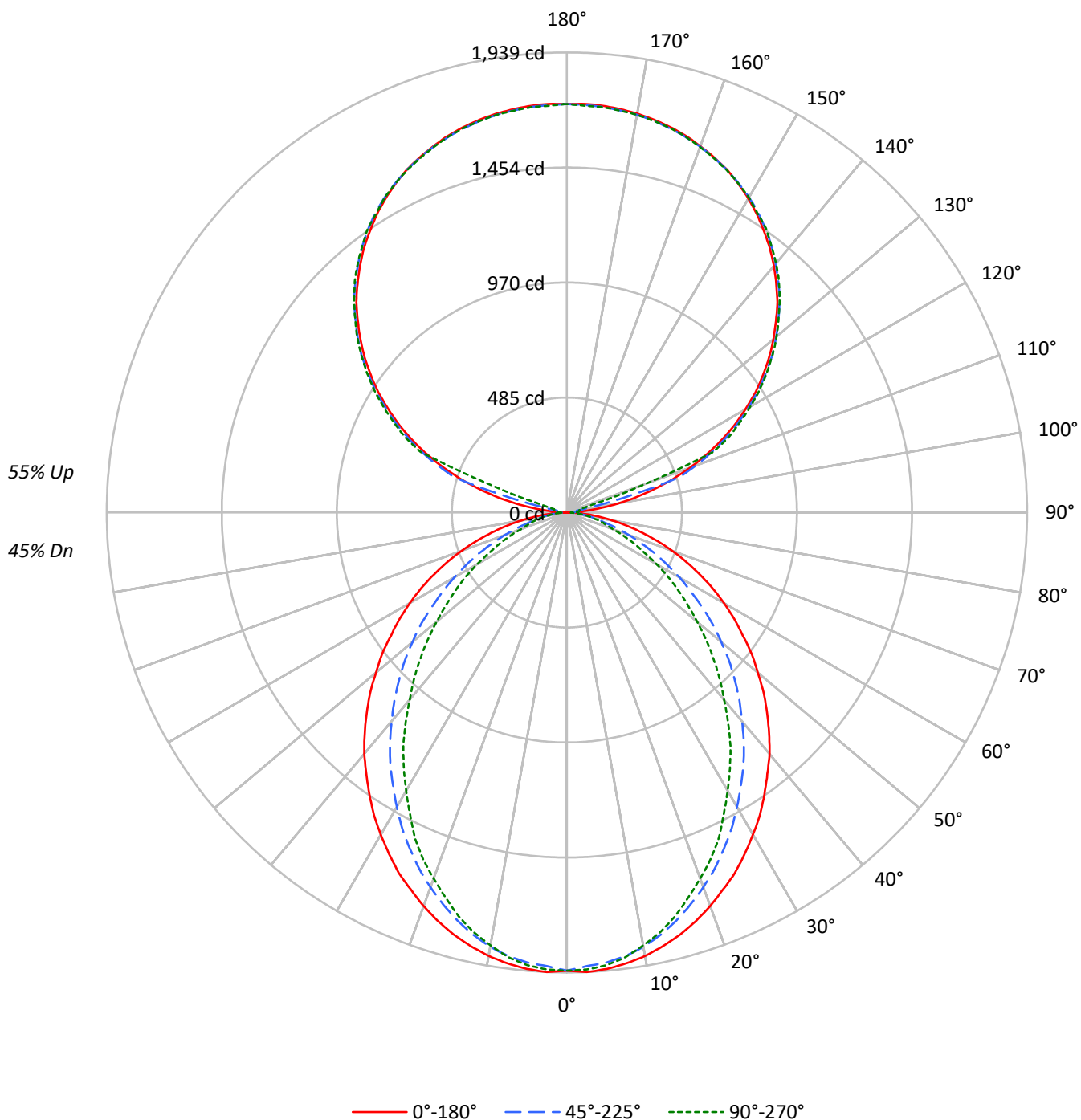
Lumens per Lamp: N/A
Luminaire Lumens: 9615.0 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 103.4
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	97	93	89	86	89	85	82	79	71	69	67	58	57	55	46	45	44
2	89	81	75	71	81	75	70	66	63	59	56	52	49	47	41	39	38
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	34	33
4	74	64	56	50	68	59	52	47	50	44	40	41	37	34	33	30	28
5	68	57	49	43	62	53	46	40	44	39	35	37	33	30	30	27	25
6	63	51	43	37	58	47	40	35	40	35	31	33	29	26	27	24	22
7	58	46	38	33	53	43	36	31	36	31	27	30	26	23	25	22	20
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18
9	50	38	31	26	46	36	29	25	30	25	22	26	22	19	21	18	16
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15

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	1.9
10°-20°	505.0	5.3
20°-30°	727.2	7.6
30°-40°	818.9	8.5
40°-50°	783.3	8.1
50°-60°	641.2	6.7
60°-70°	432.3	4.5
70°-80°	216.8	2.3
80°-90°	60.1	0.6
90°-100°	60.7	0.6
100°-110°	293.5	3.1
110°-120°	719.3	7.5
120°-130°	913.1	9.5
130°-140°	975.5	10.1
140°-150°	912.2	9.5
150°-160°	735.8	7.7
160°-170°	474.8	4.9
170°-180°	163.6	1.7
0°-30°	1413.8	14.7
0°-40°	2232.6	23.2
0°-60°	3657.2	38.0
0°-90°	4366.5	45.4
90°-120°	1073.6	11.2
90°-150°	3874.4	40.3
90°-180°	5249.0	54.6
0°-180°	9615.0	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°	1	14	31	36	38	10
95°	78	26	40	49	49	93
105°	381	395	280	54	56	404
115°	715	723	734	747	752	706
125°	1008	1018	1023	1026	1028	901
135°	1255	1262	1268	1271	1268	966
145°	1448	1457	1459	1462	1462	906
155°	1595	1592	1594	1600	1592	735
165°	1682	1678	1677	1687	1678	475
175°	1722	1715	1716	1726	1715	164
180°	1722	1722	1722	1722	1722	

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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°	1.3	14.1	30.7	35.8	38.4
92.5°	29.4	21.7	33.3	42.2	43.5
95°	78.0	25.6	39.7	48.6	48.6
97.5°	142.0	106.2	40.9	51.2	52.4
100°	216.2	241.7	42.2	52.4	53.7
102.5°	300.6	317.2	94.7	52.4	55.0
105°	381.2	395.2	280.1	53.7	56.3
107.5°	466.9	478.4	497.6	300.6	133.0
110°	552.6	562.8	576.9	534.7	351.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	634.4	643.4	657.4	669.0	666.4
115°	715.0	722.7	734.2	747.0	752.1
117.5°	794.3	803.3	809.7	819.9	821.2
120°	867.2	878.7	882.6	892.8	892.8
122.5°	941.4	950.4	955.5	961.9	963.1
125°	1007.9	1018.1	1023.3	1025.8	1028.4
127.5°	1074.4	1084.7	1091.1	1094.9	1092.3
130°	1135.8	1146.1	1151.2	1156.3	1153.7
132.5°	1194.7	1204.9	1208.7	1213.8	1210.0
135°	1254.8	1262.4	1267.6	1271.4	1267.6
137.5°	1305.9	1316.2	1318.7	1325.1	1322.6
140°	1357.1	1364.8	1368.6	1373.7	1371.2
142.5°	1404.4	1412.1	1415.9	1419.8	1415.9
145°	1447.9	1456.9	1459.4	1462.0	1462.0
147.5°	1490.1	1496.5	1499.1	1501.6	1495.2
150°	1528.5	1532.3	1534.9	1537.5	1533.6
152.5°	1563.0	1564.3	1565.6	1570.7	1564.3
155°	1595.0	1592.5	1593.7	1600.1	1592.5
157.5°	1620.6	1620.6	1619.3	1627.0	1616.8
160°	1643.6	1642.3	1641.1	1648.7	1639.8
162.5°	1665.4	1661.5	1660.2	1669.2	1661.5
165°	1682.0	1678.2	1676.9	1687.1	1678.2
167.5°	1696.1	1690.9	1690.9	1701.2	1690.9
170°	1707.6	1702.5	1702.5	1712.7	1702.5
172.5°	1715.2	1708.8	1710.1	1720.4	1708.8
175°	1721.6	1715.2	1716.5	1725.5	1715.2
177.5°	1724.2	1717.8	1719.1	1729.3	1716.5
180°	1721.6	1721.6	1721.6	1721.6	1721.6

(END OF REPORT)