

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: P1032093

Luminaire Tested: S123RDIW-B1165D1030UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032093
REPORT IS A COMBINATION OF REPORTS P993975 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D1030UB40-4F0-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

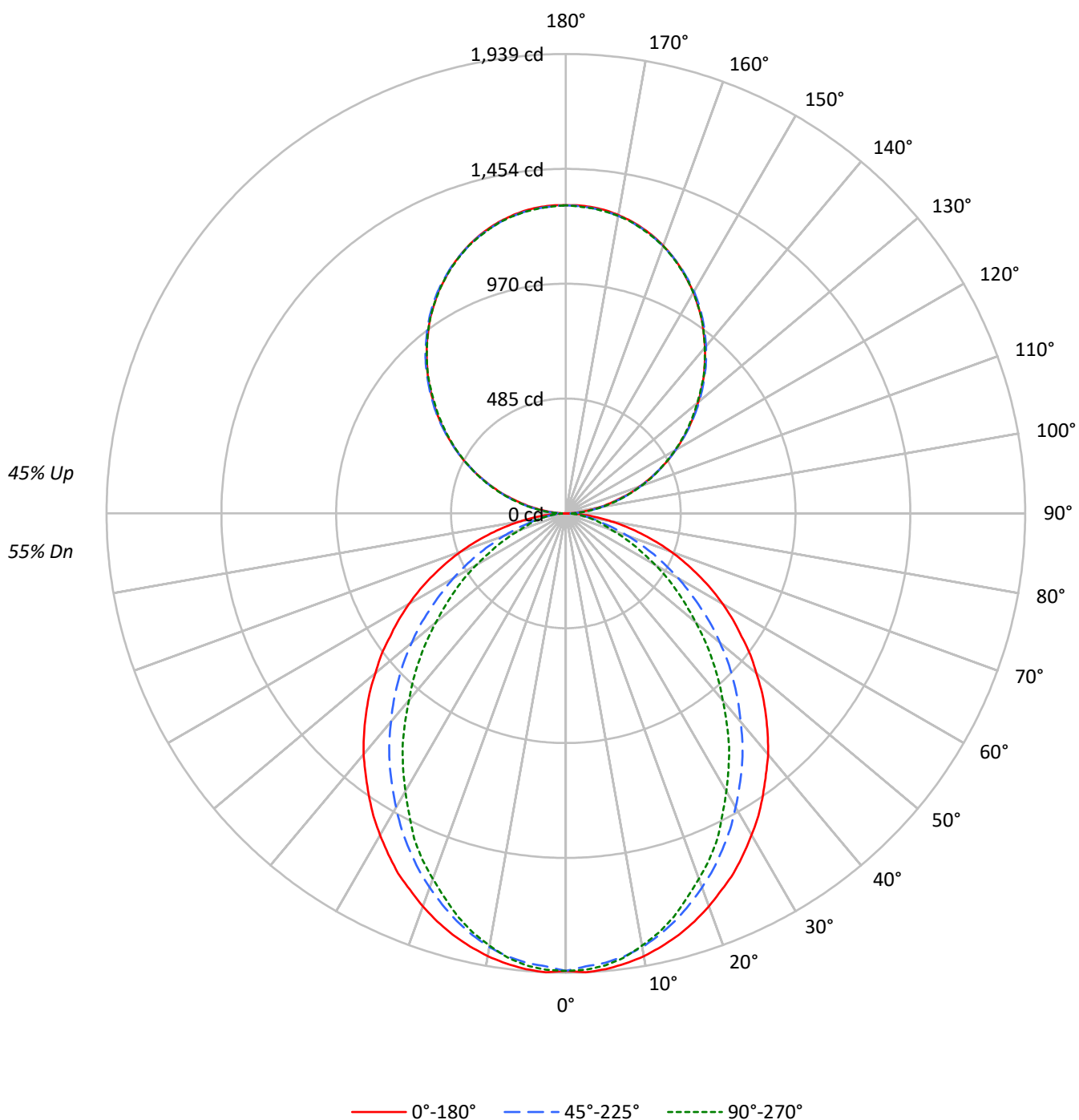
Lumens per Lamp: N/A
Luminaire Lumens: 7969.0 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 92.8
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	108	108	108	108		101	101	101	101		86	86	86		73	73	73		61	61	61
1	99	95	91	88		92	88	85	82		76	74	71		65	63	61		54	53	52
2	91	83	77	72		84	78	72	68		67	63	60		57	54	52		48	46	44
3	83	74	66	61		77	69	62	57		59	55	51		51	47	44		43	40	38
4	76	65	58	52		70	61	54	49		53	48	43		45	41	38		38	35	33
5	70	58	50	44		65	55	48	42		48	42	38		41	37	33		35	32	29
6	65	53	45	39		60	49	42	37		43	37	33		37	33	29		32	28	26
7	60	48	40	34		55	45	38	33		39	33	29		34	29	26		29	26	23
8	56	43	36	30		52	41	34	29		36	30	26		31	27	23		27	23	21
9	52	40	32	27		48	37	31	26		33	27	23		29	24	21		25	21	19
10	48	36	29	24		45	34	28	23		30	25	21		27	22	19		23	20	17

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	2.3
10°-20°	505.0	6.3
20°-30°	727.2	9.1
30°-40°	818.9	10.3
40°-50°	783.3	9.8
50°-60°	641.2	8.0
60°-70°	432.3	5.4
70°-80°	216.8	2.7
80°-90°	59.4	0.7
90°-100°	83.7	1.1
100°-110°	253.4	3.2
110°-120°	431.3	5.4
120°-130°	567.5	7.1
130°-140°	637.8	8.0
140°-150°	627.1	7.9
150°-160°	527.9	6.6
160°-170°	351.5	4.4
170°-180°	123.1	1.5
0°-30°	1413.8	17.7
0°-40°	2232.6	28.0
0°-60°	3657.2	45.9
0°-90°	4365.8	54.8
90°-120°	768.4	9.6
90°-150°	2600.8	32.6
90°-180°	3603.0	45.2
0°-180°	7969.0	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	11	24	29	31	10
95°	60	67	76	80	80	66
105°	230	232	241	241	243	246
115°	434	437	435	436	435	430
125°	635	638	636	632	628	567
135°	824	830	830	825	823	635
145°	1000	1002	1005	1004	1000	625
155°	1145	1145	1146	1150	1143	527
165°	1247	1244	1244	1250	1243	352
175°	1297	1293	1293	1299	1292	123
180°	1300	1300	1300	1300	1300	

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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°	1.0	11.2	24.5	28.6	30.6
92.5°	30.6	36.8	42.9	46.0	43.9
95°	60.3	67.4	75.6	79.7	79.7
97.5°	99.1	104.2	110.3	115.4	114.4
100°	138.9	145.1	150.2	153.2	155.3
102.5°	184.9	188.0	195.1	198.2	197.2
105°	229.8	231.9	241.1	241.1	243.1
107.5°	283.0	284.0	288.1	291.1	290.1
110°	332.0	334.0	336.1	340.2	338.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	383.1	384.1	384.1	389.2	389.2
115°	434.2	437.2	435.2	436.2	435.2
117.5°	486.3	487.3	485.2	485.2	482.2
120°	534.3	540.4	535.3	534.3	532.2
122.5°	584.3	588.4	586.4	583.3	580.2
125°	635.4	638.5	636.4	632.3	628.3
127.5°	682.4	688.5	686.5	680.3	676.3
130°	729.4	737.6	734.5	730.4	723.3
132.5°	776.4	784.5	782.5	777.4	772.3
135°	824.4	830.5	829.5	825.4	823.4
137.5°	868.3	873.4	876.5	871.4	868.3
140°	914.3	919.4	920.4	919.4	912.2
142.5°	956.2	961.3	963.3	962.3	957.2
145°	1000.1	1002.1	1005.2	1004.2	1000.1
147.5°	1037.9	1042.0	1045.0	1045.0	1038.9
150°	1077.7	1079.8	1081.8	1081.8	1075.7
152.5°	1110.4	1113.5	1114.5	1116.6	1111.4
155°	1145.2	1145.2	1146.2	1150.3	1143.1
157.5°	1174.8	1173.8	1174.8	1178.9	1172.7
160°	1202.4	1200.3	1200.3	1205.4	1201.3
162.5°	1226.9	1223.8	1224.8	1229.9	1222.8
165°	1247.3	1244.2	1244.2	1250.4	1243.2
167.5°	1264.7	1260.6	1261.6	1267.7	1261.6
170°	1279.0	1274.9	1274.9	1282.0	1274.9
172.5°	1290.2	1286.1	1286.1	1292.3	1285.1
175°	1297.4	1293.3	1293.3	1299.4	1292.3
177.5°	1301.4	1297.4	1297.4	1303.5	1296.3
180°	1300.4	1300.4	1300.4	1300.4	1300.4

(END OF REPORT)