

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: P1031032

Luminaire Tested: S123RDIW-B1000D1320UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031032
REPORT IS A COMBINATION OF REPORTS P993780 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1000D1320UB2750-4F0-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

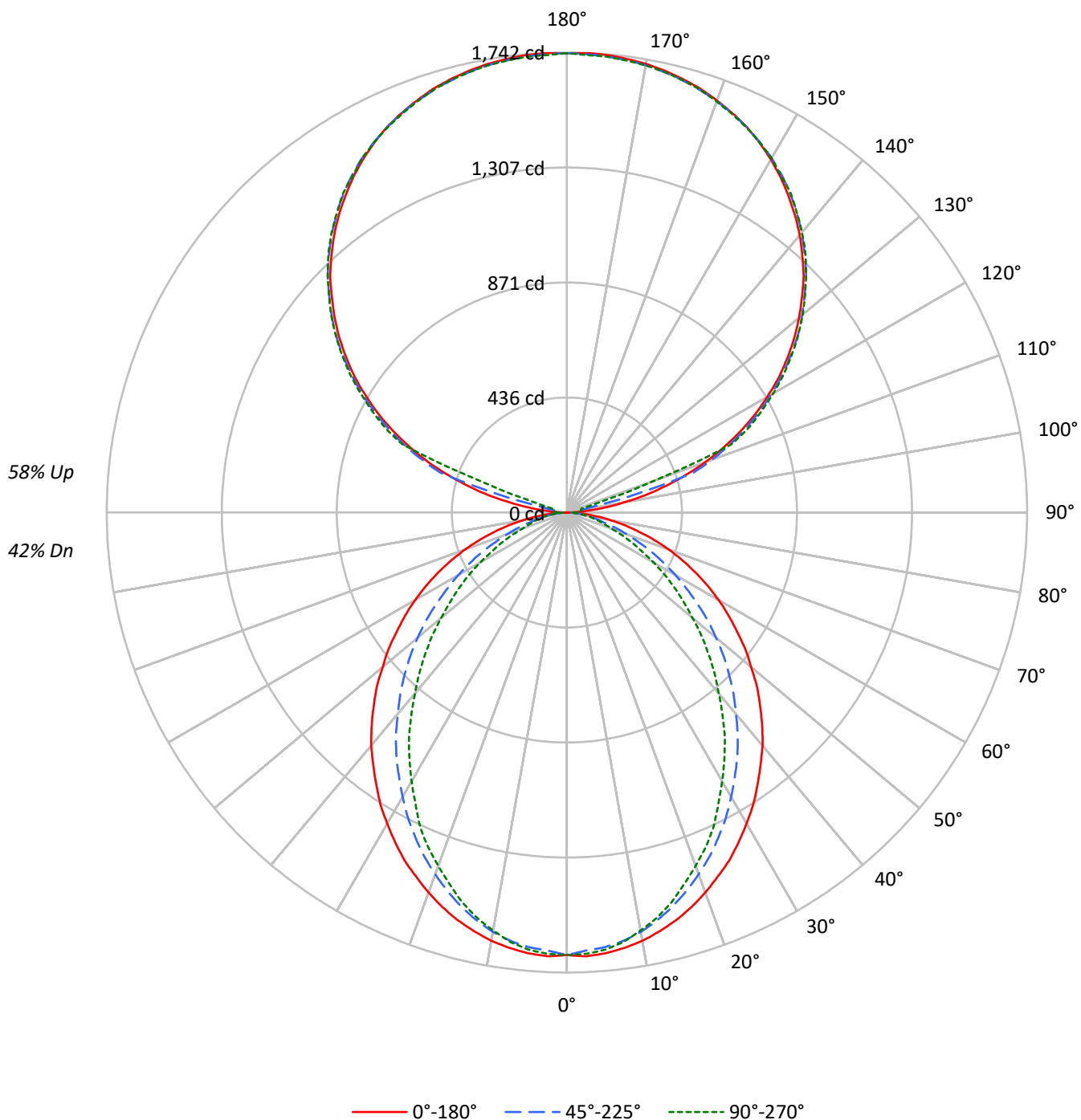
Lumens per Lamp: N/A
Luminaire Lumens: 9090.0 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 88.9
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	43	42	41
2	88	81	75	70	80	74	69	64	61	57	54	49	47	45	38	37	35
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	34	32	30
4	73	63	55	50	67	58	51	46	48	43	39	39	36	33	31	28	26
5	67	56	48	43	61	52	45	40	43	38	34	35	31	28	28	25	23
6	62	50	43	37	57	46	40	35	39	34	30	32	28	25	25	23	20
7	58	46	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18
8	53	41	34	29	49	38	32	27	32	27	23	27	23	20	21	18	16
9	50	38	30	26	45	35	28	24	30	24	21	24	21	18	20	17	15
10	46	35	28	23	42	32	26	22	27	22	19	23	19	16	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18034	18034	18034
5°	18063	17396	17349
10°	17922	16742	16411
15°	17688	15933	15385
20°	17384	15054	14239
25°	17069	14140	13153
30°	16664	13168	11868
35°	16249	12214	10698
40°	15859	11177	9406
45°	15356	10163	8244
50°	14804	9081	7042
55°	14231	7922	5939
60°	13683	6734	4821
65°	12974	5514	3763
70°	12086	4170	2690
75°	10803	2823	2130
80°	9218	1962	1494
85°	6916	1058	782

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 15356 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.5	1.7
10°-20°	438.1	4.8
20°-30°	630.8	6.9
30°-40°	710.4	7.8
40°-50°	679.5	7.5
50°-60°	556.3	6.1
60°-70°	375.0	4.1
70°-80°	188.1	2.1
80°-90°	52.7	0.6
90°-100°	61.3	0.7
100°-110°	296.5	3.3
110°-120°	726.6	8.0
120°-130°	922.4	10.1
130°-140°	985.3	10.8
140°-150°	921.4	10.1
150°-160°	743.2	8.2
160°-170°	479.6	5.3
170°-180°	165.3	1.8
0°-30°	1226.5	13.5
0°-40°	1936.9	21.3
0°-60°	3172.7	34.9
0°-90°	3788.5	41.7
90°-120°	1084.4	11.9
90°-150°	3913.5	43.1
90°-180°	5302.0	58.3
0°-180°	9090.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1675	1675	1675	1675	1675	
5°	1675	1669	1652	1664	1662	159
15°	1598	1583	1545	1538	1529	450
25°	1454	1420	1357	1329	1314	669
35°	1258	1209	1125	1067	1042	788
45°	1034	973	868	791	758	798
55°	785	719	603	524	497	704
65°	537	462	356	289	274	531
75°	284	219	144	130	128	303
85°	72	42	38	35	35	79
90°	1	14	31	36	39	9
95°	79	26	40	49	49	94
105°	385	399	283	54	57	408
115°	722	730	742	754	760	713
125°	1018	1028	1034	1036	1039	910
135°	1267	1275	1280	1284	1280	976
145°	1462	1472	1474	1477	1477	916
155°	1611	1608	1610	1616	1608	742
165°	1699	1695	1694	1704	1695	480
175°	1739	1733	1734	1743	1733	166
180°	1739	1739	1739	1739	1739	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1675.4	1675.4	1675.4	1675.4	1675.4
2.5°	1682.2	1676.7	1660.4	1675.4	1672.7
5°	1675.4	1668.6	1652.3	1664.5	1661.8
7.5°	1663.2	1656.4	1636.0	1644.1	1640.1
10°	1646.9	1637.3	1612.9	1614.2	1607.4
12.5°	1623.8	1612.9	1581.6	1580.3	1572.1
15°	1597.9	1583.0	1544.9	1538.2	1528.6
17.5°	1566.7	1550.4	1502.8	1489.2	1475.6
20°	1531.4	1509.6	1458.0	1440.3	1424.0
22.5°	1492.0	1466.1	1410.4	1387.3	1372.4
25°	1453.9	1419.9	1357.4	1328.9	1314.0
27.5°	1407.7	1371.0	1303.1	1265.0	1241.9
30°	1360.1	1319.4	1243.3	1197.1	1175.4
32.5°	1312.6	1265.0	1183.5	1131.9	1108.8
35°	1258.2	1209.3	1125.1	1066.7	1042.2
37.5°	1203.9	1150.9	1062.6	997.4	967.5
40°	1152.3	1092.5	996.0	925.3	894.1
42.5°	1093.8	1034.0	933.5	854.7	827.5
45°	1034.0	972.9	868.3	790.8	758.2
47.5°	975.6	907.7	804.4	720.2	691.6
50°	910.4	846.5	736.5	652.2	621.0
52.5°	852.0	781.3	672.6	584.3	557.1
55°	785.4	718.8	603.3	524.5	497.3
57.5°	725.6	653.6	536.7	462.0	438.9
60°	663.1	588.4	475.6	402.2	379.1
62.5°	600.6	525.9	413.1	345.1	320.7
65°	536.7	462.0	356.0	289.4	274.5
67.5°	472.9	396.8	293.5	243.2	226.9
70°	410.4	337.0	241.9	194.3	179.4
72.5°	347.9	275.8	191.6	154.9	150.8
75°	284.0	218.8	144.0	130.4	127.7
77.5°	225.6	165.8	112.8	104.6	101.9
80°	169.8	114.1	85.6	81.5	78.8
82.5°	116.9	70.7	61.1	57.1	57.1
85°	72.0	42.1	38.0	35.3	35.3
87.5°	32.6	17.7	17.7	16.3	14.9
90°	1.3	14.2	31.0	36.2	38.8
92.5°	29.7	22.0	33.6	42.6	43.9
95°	78.8	25.8	40.1	49.1	49.1
97.5°	143.4	107.2	41.3	51.7	53.0
100°	218.3	244.2	42.6	53.0	54.3
102.5°	303.6	320.4	95.6	53.0	55.6
105°	385.0	399.2	282.9	54.3	56.8
107.5°	471.6	483.2	502.6	303.6	134.4
110°	558.1	568.5	582.7	540.0	355.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	640.8	649.9	664.1	675.7	673.1
115°	722.2	730.0	741.6	754.5	759.7
117.5°	802.3	811.4	817.8	828.2	829.5
120°	876.0	887.6	891.5	901.8	901.8
122.5°	950.9	959.9	965.1	971.6	972.9
125°	1018.1	1028.4	1033.6	1036.2	1038.8
127.5°	1085.3	1095.6	1102.1	1105.9	1103.4
130°	1147.3	1157.6	1162.8	1168.0	1165.4
132.5°	1206.7	1217.1	1220.9	1226.1	1222.2
135°	1267.4	1275.2	1280.4	1284.2	1280.4
137.5°	1319.1	1329.5	1332.0	1338.5	1335.9
140°	1370.8	1378.5	1382.4	1387.6	1385.0
142.5°	1418.6	1426.4	1430.2	1434.1	1430.2
145°	1462.5	1471.6	1474.2	1476.7	1476.7
147.5°	1505.2	1511.6	1514.2	1516.8	1510.3
150°	1543.9	1547.8	1550.4	1553.0	1549.1
152.5°	1578.8	1580.1	1581.4	1586.6	1580.1
155°	1611.1	1608.5	1609.8	1616.3	1608.5
157.5°	1636.9	1636.9	1635.7	1643.4	1633.1
160°	1660.2	1658.9	1657.6	1665.4	1656.3
162.5°	1682.2	1678.3	1677.0	1686.0	1678.3
165°	1699.0	1695.1	1693.8	1704.1	1695.1
167.5°	1713.2	1708.0	1708.0	1718.3	1708.0
170°	1724.8	1719.6	1719.6	1730.0	1719.6
172.5°	1732.6	1726.1	1727.4	1737.7	1726.1
175°	1739.0	1732.6	1733.8	1742.9	1732.6
177.5°	1741.6	1735.1	1736.4	1746.8	1733.8
180°	1739.0	1739.0	1739.0	1739.0	1739.0

(END OF REPORT)