

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: P1032017

Luminaire Tested: S123RDIW-B1000D1320UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032017
REPORT IS A COMBINATION OF REPORTS P993799 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1000D1320UB40-4F0-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

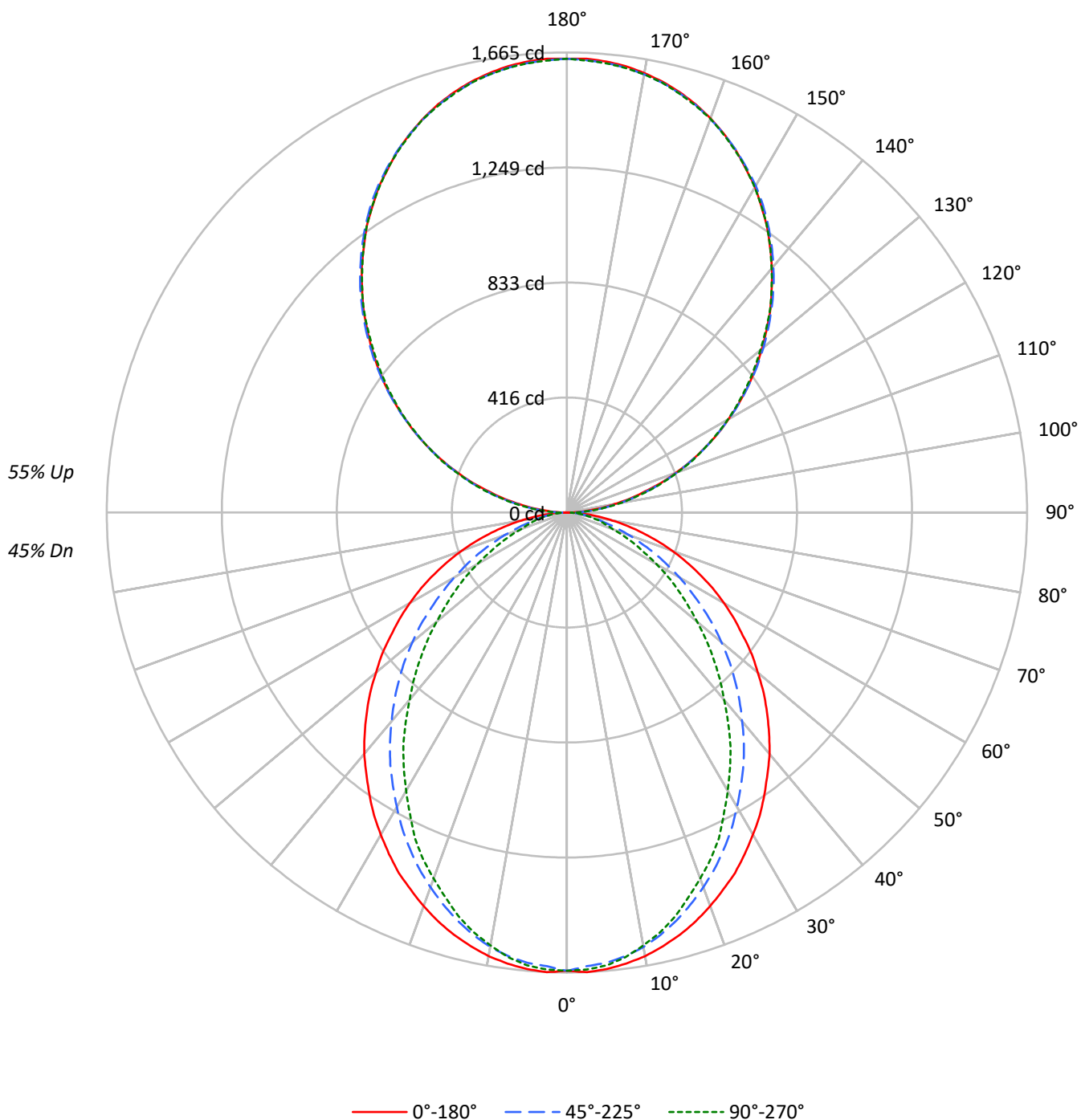
Lumens per Lamp: N/A
Luminaire Lumens: 8301.0 lumens
Efficiency: N/A
Efficacy: 93.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	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	70	81	75	70	65	63	59	56	51	49	47	41	39	38
3	81	72	65	59	74	66	60	55	55	51	47	46	42	40	37	34	32
4	74	64	56	50	68	59	52	47	49	44	40	41	37	34	33	30	28
5	68	57	49	43	62	52	46	40	44	39	35	37	33	30	30	27	25
6	63	51	43	37	57	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	19
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	24	30	25	22	26	22	19	21	18	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17853	17853	17853
5°	17882	17221	17174
10°	17741	16574	16247
15°	17511	15773	15231
20°	17209	14903	14096
25°	16897	13998	13021
30°	16498	13036	11749
35°	16086	12091	10591
40°	15699	11064	9311
45°	15203	10060	8161
50°	14655	8990	6971
55°	14088	7842	5880
60°	13544	6666	4773
65°	12843	5458	3725
70°	11962	4127	2663
75°	10693	2795	2109
80°	9126	1941	1479
85°	6849	1050	776

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 15203 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.9	1.9
10°-20°	433.7	5.2
20°-30°	624.5	7.5
30°-40°	703.3	8.5
40°-50°	672.7	8.1
50°-60°	550.7	6.6
60°-70°	371.3	4.5
70°-80°	186.2	2.2
80°-90°	52.2	0.6
90°-100°	105.7	1.3
100°-110°	320.0	3.9
110°-120°	544.7	6.6
120°-130°	716.6	8.6
130°-140°	805.5	9.7
140°-150°	791.9	9.5
150°-160°	666.7	8.0
160°-170°	443.9	5.3
170°-180°	155.4	1.9
0°-30°	1214.2	14.6
0°-40°	1917.4	23.1
0°-60°	3140.8	37.8
0°-90°	3750.5	45.2
90°-120°	970.4	11.7
90°-150°	3284.5	39.6
90°-180°	4551.0	54.8
0°-180°	8301.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1659	1659	1659	1659	1659	
5°	1659	1652	1636	1648	1645	157
15°	1582	1567	1529	1523	1513	446
25°	1439	1406	1344	1316	1301	662
35°	1246	1197	1114	1056	1032	780
45°	1024	963	860	783	751	790
55°	778	712	597	519	492	697
65°	531	457	352	286	272	526
75°	281	217	143	129	126	300
85°	71	42	38	35	35	78
90°	1	14	31	36	39	10
95°	76	85	96	101	101	84
105°	290	293	304	304	307	311
115°	548	552	550	551	550	543
125°	802	806	804	799	793	716
135°	1041	1049	1048	1042	1040	802
145°	1263	1266	1270	1268	1263	789
155°	1446	1446	1448	1453	1444	666
165°	1575	1571	1571	1579	1570	444
175°	1638	1633	1633	1641	1632	156
180°	1642	1642	1642	1642	1642	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1658.6	1658.6	1658.6	1658.6	1658.6
2.5°	1665.3	1659.9	1643.8	1658.6	1655.9
5°	1658.6	1651.8	1635.7	1647.8	1645.1
7.5°	1646.5	1639.7	1619.6	1627.6	1623.6
10°	1630.3	1620.9	1596.7	1598.0	1591.3
12.5°	1607.5	1596.7	1565.8	1564.4	1556.3
15°	1581.9	1567.1	1529.4	1522.7	1513.3
17.5°	1551.0	1534.8	1487.7	1474.3	1460.8
20°	1516.0	1494.5	1443.3	1425.9	1409.7
22.5°	1477.0	1451.4	1396.3	1373.4	1358.6
25°	1439.3	1405.7	1343.8	1315.6	1300.8
27.5°	1393.6	1357.3	1290.0	1252.3	1229.5
30°	1346.5	1306.1	1230.8	1185.1	1163.6
32.5°	1299.4	1252.3	1171.6	1120.5	1097.6
35°	1245.6	1197.2	1113.8	1055.9	1031.7
37.5°	1191.8	1139.3	1051.9	987.3	957.7
40°	1140.7	1081.5	986.0	916.0	885.1
42.5°	1082.8	1023.7	924.1	846.1	819.2
45°	1023.7	963.1	859.5	782.9	750.6
47.5°	965.8	898.6	796.3	712.9	684.7
50°	901.2	838.0	729.1	645.7	614.7
52.5°	843.4	773.5	665.8	578.4	551.5
55°	777.5	711.6	597.2	519.2	492.3
57.5°	718.3	647.0	531.3	457.4	434.5
60°	656.4	582.4	470.8	398.2	375.3
62.5°	594.6	520.6	408.9	341.7	317.5
65°	531.3	457.4	352.4	286.5	271.7
67.5°	468.1	392.8	290.6	240.8	224.6
70°	406.2	333.6	239.4	192.4	177.6
72.5°	344.4	273.1	189.7	153.3	149.3
75°	281.1	216.6	142.6	129.1	126.4
77.5°	223.3	164.1	111.6	103.6	100.9
80°	168.1	113.0	84.7	80.7	78.0
82.5°	115.7	69.9	60.5	56.5	56.5
85°	71.3	41.7	37.7	35.0	35.0
87.5°	32.3	17.5	17.5	16.1	14.8
90°	1.3	14.2	31.0	36.1	38.7
92.5°	38.7	46.4	54.2	58.1	55.5
95°	76.1	85.1	95.5	100.6	100.6
97.5°	125.1	131.6	139.3	145.8	144.5
100°	175.5	183.2	189.6	193.5	196.1
102.5°	233.5	237.4	246.4	250.3	249.0
105°	290.3	292.9	304.5	304.5	307.0
107.5°	357.4	358.6	363.8	367.7	366.4
110°	419.3	421.9	424.4	429.6	427.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	483.8	485.1	485.1	491.5	491.5
115°	548.3	552.2	549.6	550.9	549.6
117.5°	614.1	615.4	612.8	612.8	608.9
120°	674.7	682.5	676.0	674.7	672.1
122.5°	737.9	743.1	740.5	736.7	732.8
125°	802.4	806.3	803.7	798.6	793.4
127.5°	861.8	869.5	867.0	859.2	854.1
130°	921.1	931.5	927.6	922.4	913.4
132.5°	980.5	990.8	988.2	981.8	975.3
135°	1041.1	1048.9	1047.6	1042.4	1039.8
137.5°	1096.6	1103.0	1106.9	1100.5	1096.6
140°	1154.6	1161.1	1162.4	1161.1	1152.1
142.5°	1207.5	1214.0	1216.6	1215.3	1208.8
145°	1263.0	1265.6	1269.5	1268.2	1263.0
147.5°	1310.7	1315.9	1319.8	1319.8	1312.0
150°	1361.1	1363.6	1366.2	1366.2	1358.5
152.5°	1402.3	1406.2	1407.5	1410.1	1403.6
155°	1446.2	1446.2	1447.5	1452.7	1443.6
157.5°	1483.6	1482.3	1483.6	1488.8	1481.0
160°	1518.5	1515.9	1515.9	1522.3	1517.2
162.5°	1549.4	1545.5	1546.8	1553.3	1544.3
165°	1575.2	1571.3	1571.3	1579.1	1570.1
167.5°	1597.2	1592.0	1593.3	1601.0	1593.3
170°	1615.2	1610.1	1610.1	1619.1	1610.1
172.5°	1629.4	1624.2	1624.2	1632.0	1623.0
175°	1638.4	1633.3	1633.3	1641.0	1632.0
177.5°	1643.6	1638.4	1638.4	1646.2	1637.1
180°	1642.3	1642.3	1642.3	1642.3	1642.3

(END OF REPORT)