

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: P1033044

Luminaire Tested: S124RDIW-B795D1050UB2750-4F0-XX-W2A-F1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033044
REPORT IS A COMBINATION OF REPORTS P1000712 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B795D1050UB2750-4F0-XX-W2A-F1_5000K
Description: Define 4 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

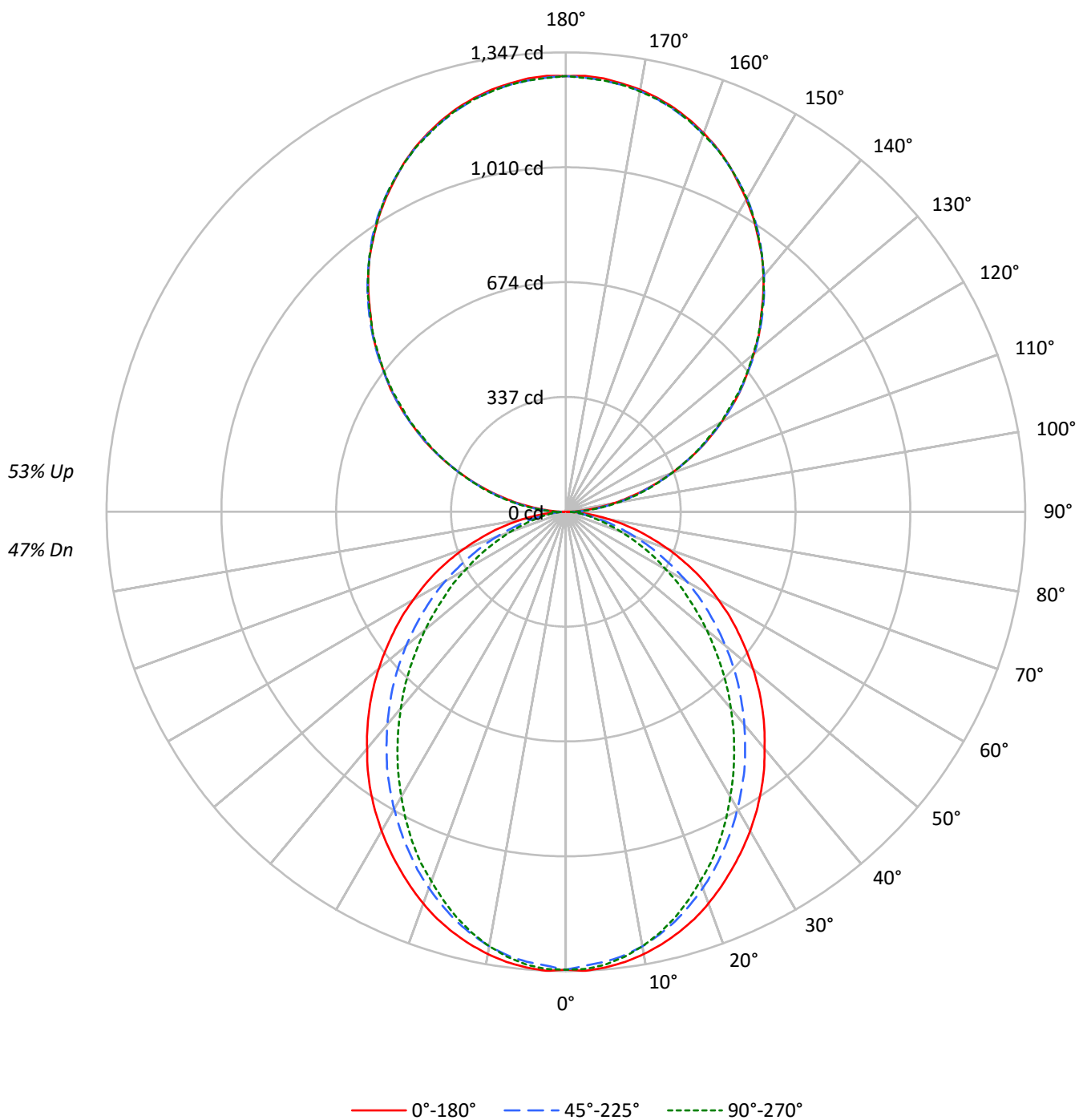
Lumens per Lamp: N/A
Luminaire Lumens: 6650.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.4
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
RCR																	
0	106	106	106	106	98	98	98	98	82	82	82		67	67	67		53
1	97	93	89	86	89	86	82	80	72	70	67		59	57	56		47
2	89	82	76	71	81	75	70	66	63	59	56		52	50	47		42
3	81	72	65	59	74	66	60	55	56	51	48		46	43	40		37
4	74	64	56	50	68	59	52	47	50	45	41		41	38	35		34
5	68	57	49	43	63	53	46	40	45	39	35		37	33	30		30
6	63	51	43	37	58	47	40	35	40	35	31		34	30	26		28
7	58	46	38	33	53	43	36	31	37	31	27		31	27	23		25
8	54	42	34	29	50	39	32	27	33	28	24		28	24	21		23
9	50	38	31	26	46	36	29	25	31	25	22		26	22	19		21
10	47	35	28	23	43	33	26	22	28	23	20		24	20	17		20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10951	10951	10951
5°	10952	10625	10627
10°	10859	10290	10168
15°	10710	9873	9627
20°	10514	9397	9009
25°	10271	8883	8406
30°	10031	8360	7729
35°	9769	7828	7068
40°	9456	7257	6388
45°	9163	6690	5716
50°	8829	6071	5031
55°	8469	5436	4326
60°	8069	4762	3629
65°	7682	3988	2959
70°	7135	3175	2261
75°	6429	2310	1581
80°	5371	1418	1137
85°	4039	817	625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9163 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.3	1.9
10°-20°	352.1	5.3
20°-30°	508.3	7.6
30°-40°	576.1	8.7
40°-50°	556.3	8.4
50°-60°	462.5	7.0
60°-70°	319.2	4.8
70°-80°	161.3	2.4
80°-90°	43.7	0.7
90°-100°	83.3	1.3
100°-110°	249.4	3.8
110°-120°	423.7	6.4
120°-130°	558.7	8.4
130°-140°	627.6	9.4
140°-150°	616.8	9.3
150°-160°	518.8	7.8
160°-170°	345.2	5.2
170°-180°	120.9	1.8
0°-30°	986.7	14.8
0°-40°	1562.8	23.5
0°-60°	2581.6	38.8
0°-90°	3105.7	46.7
90°-120°	756.3	11.4
90°-150°	2559.4	38.5
90°-180°	3544.0	53.3
0°-180°	6650.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1343	1343	1343	1343	1343	
5°	1341	1337	1324	1335	1333	127
15°	1277	1268	1242	1240	1233	360
25°	1155	1136	1094	1077	1066	532
35°	998	966	914	879	861	624
45°	814	776	715	664	646	628
55°	617	576	509	456	436	552
65°	420	375	310	265	253	414
75°	223	185	137	113	107	235
85°	56	35	32	30	30	61
90°	3	14	22	28	30	8
95°	59	68	75	78	78	64
105°	230	231	235	238	241	244
115°	431	431	429	428	427	425
125°	627	627	626	624	622	559
135°	809	815	815	813	810	626
145°	983	987	988	987	984	615
155°	1126	1126	1125	1129	1125	518
165°	1226	1223	1221	1227	1223	346
175°	1275	1270	1270	1276	1270	121
180°	1277	1277	1277	1277	1277	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1342.9	1342.9	1342.9	1342.9	1342.9
2.5°	1347.1	1342.9	1331.6	1342.9	1341.9
5°	1340.9	1336.8	1324.4	1334.7	1332.7
7.5°	1331.6	1327.5	1312.1	1319.3	1316.2
10°	1317.2	1312.1	1293.6	1297.7	1293.6
12.5°	1298.7	1292.6	1269.9	1272.0	1265.8
15°	1277.1	1267.9	1242.2	1240.1	1232.9
17.5°	1252.4	1239.1	1209.3	1204.1	1193.8
20°	1222.6	1209.3	1174.3	1166.1	1152.7
22.5°	1189.7	1174.3	1136.3	1122.9	1112.6
25°	1154.8	1136.3	1094.1	1076.6	1066.3
27.5°	1118.8	1096.1	1051.9	1031.4	1017.0
30°	1080.7	1055.0	1006.7	981.0	964.5
32.5°	1040.6	1010.8	960.4	929.6	914.1
35°	998.5	965.6	914.1	879.2	860.7
37.5°	954.2	920.3	863.8	825.7	807.2
40°	906.9	873.0	814.4	771.2	752.7
42.5°	861.7	825.7	764.0	719.8	700.3
45°	814.4	776.4	714.7	664.3	645.8
47.5°	766.1	727.0	663.2	610.8	590.2
50°	716.7	676.6	610.8	559.4	539.8
52.5°	666.3	627.3	559.4	506.9	486.4
55°	617.0	575.8	509.0	455.5	436.0
57.5°	568.6	525.5	459.6	405.1	390.7
60°	516.2	475.1	409.3	355.8	339.3
62.5°	468.9	425.7	357.8	309.5	297.2
65°	419.5	375.3	309.5	265.3	253.0
67.5°	368.1	326.0	264.3	225.2	210.8
70°	319.8	276.6	218.0	184.1	173.8
72.5°	268.4	230.3	175.8	148.1	138.8
75°	223.1	185.1	136.8	113.1	106.9
77.5°	175.8	142.9	101.8	85.3	83.3
80°	130.6	100.8	69.9	66.8	65.8
82.5°	91.5	64.8	50.4	48.3	47.3
85°	55.5	35.0	31.9	29.8	29.8
87.5°	23.7	15.4	14.4	13.4	14.4
90°	3.0	13.8	21.7	27.7	29.6
92.5°	25.7	38.5	43.5	46.4	47.4
95°	59.3	68.2	75.1	78.0	78.0
97.5°	94.8	102.7	110.6	114.6	114.6
100°	138.3	142.3	151.2	153.1	153.1
102.5°	183.8	184.7	192.6	195.6	196.6
105°	230.2	231.2	235.1	238.1	241.1
107.5°	278.6	279.6	280.6	284.5	283.5
110°	328.0	330.0	329.0	327.0	330.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	379.4	379.4	377.4	377.4	377.4
115°	430.7	430.7	428.8	427.8	426.8
117.5°	479.1	479.1	478.2	475.2	472.2
120°	527.6	531.5	528.5	523.6	525.6
122.5°	577.9	578.9	577.9	575.0	570.0
125°	627.3	627.3	626.3	624.4	622.4
127.5°	671.8	674.8	672.8	670.8	669.8
130°	719.2	722.2	722.2	720.2	716.2
132.5°	767.6	769.6	768.6	766.6	765.6
135°	809.1	815.0	815.0	813.1	810.1
137.5°	855.5	858.5	860.5	857.5	858.5
140°	902.0	903.9	903.9	903.0	902.0
142.5°	944.5	946.4	945.4	945.4	945.4
145°	983.0	986.9	987.9	986.9	984.0
147.5°	1022.5	1027.4	1026.5	1025.5	1024.5
150°	1058.1	1062.0	1062.0	1062.0	1061.0
152.5°	1091.7	1093.6	1094.6	1097.6	1094.6
155°	1126.2	1126.2	1125.2	1129.2	1125.2
157.5°	1155.9	1153.9	1153.9	1156.9	1153.9
160°	1181.6	1180.6	1179.6	1182.5	1177.6
162.5°	1205.3	1202.3	1201.3	1207.2	1202.3
165°	1226.0	1223.0	1221.1	1227.0	1223.0
167.5°	1242.8	1238.9	1238.9	1244.8	1238.9
170°	1256.6	1251.7	1252.7	1258.6	1251.7
172.5°	1266.5	1262.6	1262.6	1269.5	1262.6
175°	1275.4	1270.5	1269.5	1276.4	1269.5
177.5°	1279.4	1274.4	1274.4	1281.3	1273.4
180°	1277.4	1277.4	1277.4	1277.4	1277.4

(END OF REPORT)