

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: P1034026

Luminaire Tested: S124RDIW-B350D1050UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034026
REPORT IS A COMBINATION OF REPORTS P1000282 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D1050UB30-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

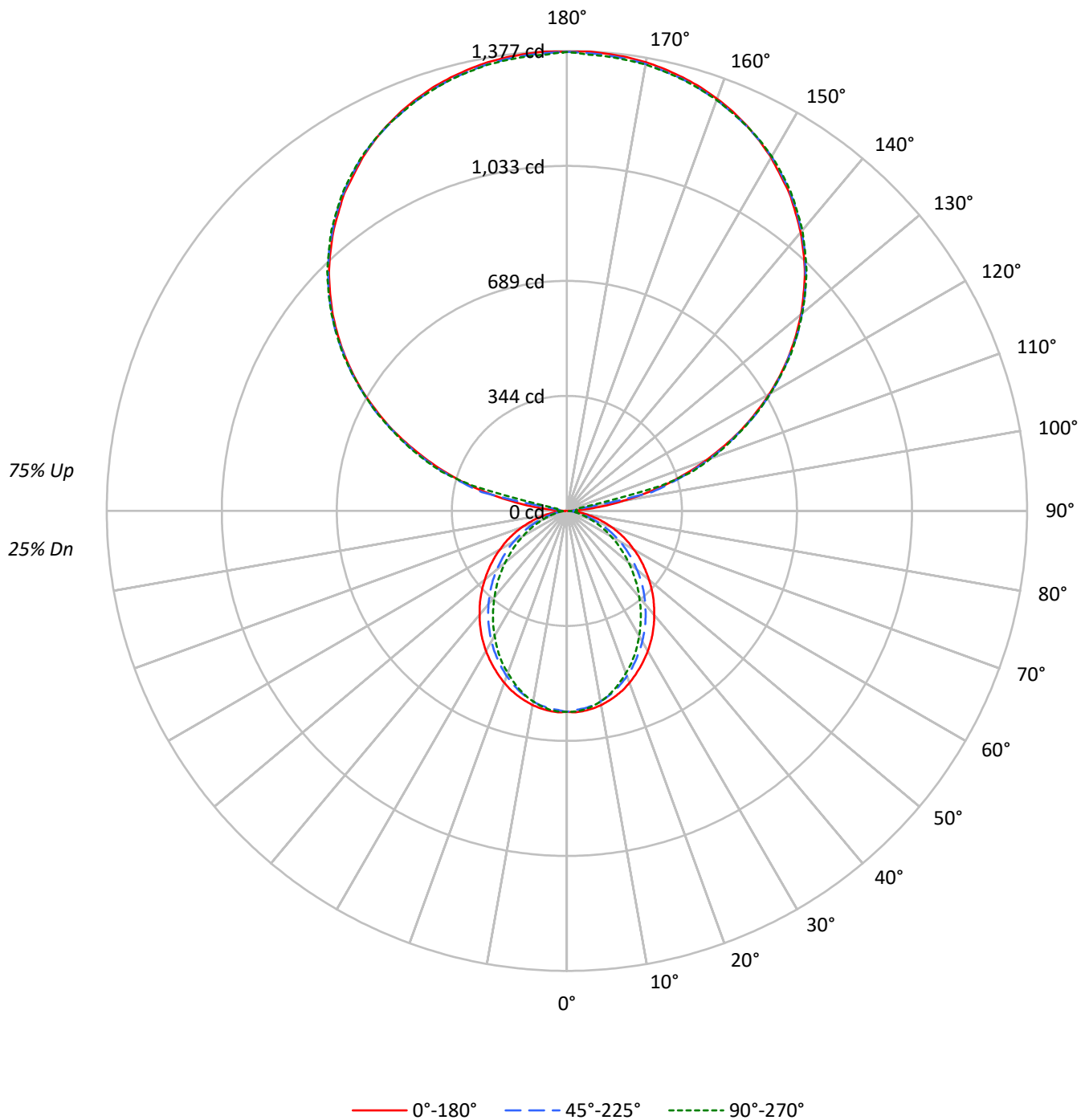
Lumens per Lamp: N/A
Luminaire Lumens: 5644.0 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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

TEST NUMBER: P1034026

CATALOG NUMBER: S124RDIW-B350D1050UB30-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1034026

CATALOG NUMBER: S124RDIW-B350D1050UB30-4F0-XX-W2A-F

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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33
1	92	88	84	81	82	79	76	73	61	59	57	44	43	42	29	29	28
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24
3	77	68	61	55	68	61	55	50	47	43	40	35	32	30	23	22	20
4	70	60	52	47	62	54	47	42	42	37	34	31	28	26	21	19	18
5	64	53	46	40	57	48	41	36	37	33	29	28	25	22	19	17	15
6	59	48	40	34	52	43	36	31	34	29	25	25	22	19	17	15	13
7	55	43	35	30	48	39	32	27	30	26	22	23	19	17	15	13	12
8	50	39	31	26	45	35	29	24	28	23	20	21	17	15	14	12	11
9	47	35	28	23	42	32	26	21	25	21	17	19	16	14	13	11	10
10	44	32	25	21	39	29	23	19	23	19	16	17	14	12	12	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4906	4906	4906
5°	4906	4760	4761
10°	4865	4610	4555
15°	4798	4422	4312
20°	4710	4209	4036
25°	4601	3979	3766
30°	4493	3744	3463
35°	4376	3507	3166
40°	4236	3251	2862
45°	4104	2996	2560
50°	3956	2719	2254
55°	3794	2435	1938
60°	3614	2133	1626
65°	3441	1786	1325
70°	3197	1423	1012
75°	2882	1035	708
80°	2406	635	510
85°	1812	366	281

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4104 cd/sqm

TEST NUMBER: P1034026

CATALOG NUMBER: S124RDIW-B350D1050UB30-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	1.0
10°-20°	157.7	2.8
20°-30°	227.7	4.0
30°-40°	258.1	4.6
40°-50°	249.2	4.4
50°-60°	207.2	3.7
60°-70°	143.0	2.5
70°-80°	72.3	1.3
80°-90°	21.2	0.4
90°-100°	45.6	0.8
100°-110°	300.3	5.3
110°-120°	573.5	10.2
120°-130°	728.0	12.9
130°-140°	778.8	13.8
140°-150°	728.3	12.9
150°-160°	587.3	10.4
160°-170°	378.8	6.7
170°-180°	130.5	2.3
0°-30°	442.0	7.8
0°-40°	700.1	12.4
0°-60°	1156.4	20.5
0°-90°	1392.8	24.7
90°-120°	919.4	16.3
90°-150°	3154.6	55.9
90°-180°	4251.0	75.3
0°-180°	5644.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	602	602	602	602	602	
5°	601	599	593	598	597	57
15°	572	568	556	556	552	161
25°	517	509	490	482	478	238
35°	447	432	410	394	386	280
45°	365	348	320	298	289	281
55°	276	258	228	204	195	247
65°	188	168	139	119	113	186
75°	100	83	61	51	48	105
85°	25	16	14	13	13	27
90°	3	14	23	29	31	4
95°	56	22	23	29	30	70
105°	309	316	321	330	293	324
115°	578	581	580	582	582	568
125°	812	816	814	817	818	725
135°	1007	1006	1010	1012	1014	776
145°	1161	1164	1164	1165	1167	726
155°	1273	1274	1271	1275	1272	587
165°	1343	1338	1338	1346	1337	380
175°	1374	1368	1369	1378	1366	131
180°	1374	1374	1374	1374	1374	

TEST NUMBER: P1034026

CATALOG NUMBER: S124RDIW-B350D1050UB30-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	601.6	601.6	601.6	601.6	601.6
2.5°	603.4	601.6	596.5	601.6	601.1
5°	600.7	598.8	593.3	597.9	597.0
7.5°	596.5	594.7	587.8	591.0	589.6
10°	590.1	587.8	579.5	581.3	579.5
12.5°	581.8	579.0	568.9	569.8	567.0
15°	572.1	567.9	556.4	555.5	552.3
17.5°	561.0	555.1	541.7	539.4	534.8
20°	547.7	541.7	526.0	522.3	516.4
22.5°	532.9	526.0	509.0	503.0	498.4
25°	517.3	509.0	490.1	482.3	477.7
27.5°	501.2	491.0	471.2	462.0	455.6
30°	484.1	472.6	450.9	439.4	432.1
32.5°	466.2	452.8	430.2	416.4	409.5
35°	447.3	432.5	409.5	393.8	385.5
37.5°	427.5	412.3	386.9	369.9	361.6
40°	406.3	391.1	364.8	345.5	337.2
42.5°	386.0	369.9	342.2	322.4	313.7
45°	364.8	347.8	320.1	297.6	289.3
47.5°	343.2	325.7	297.1	273.6	264.4
50°	321.1	303.1	273.6	250.6	241.8
52.5°	298.5	281.0	250.6	227.1	217.9
55°	276.4	257.9	228.0	204.1	195.3
57.5°	254.7	235.4	205.9	181.5	175.0
60°	231.2	212.8	183.3	159.4	152.0
62.5°	210.0	190.7	160.3	138.6	133.1
65°	187.9	168.1	138.6	118.8	113.3
67.5°	164.9	146.0	118.4	100.9	94.4
70°	143.3	123.9	97.7	82.5	77.8
72.5°	120.2	103.2	78.8	66.3	62.2
75°	100.0	82.9	61.3	50.7	47.9
77.5°	78.8	64.0	45.6	38.2	37.3
80°	58.5	45.1	31.3	29.9	29.5
82.5°	41.0	29.0	22.6	21.6	21.2
85°	24.9	15.7	14.3	13.4	13.4
87.5°	10.6	6.9	6.4	6.0	6.4
90°	3.1	14.4	22.6	28.8	30.8
92.5°	15.4	13.4	21.6	27.7	27.7
95°	56.5	21.6	22.6	28.8	29.8
97.5°	107.9	130.5	22.6	27.7	28.8
100°	168.5	187.0	45.2	27.7	28.8
102.5°	236.3	248.7	261.0	29.8	29.8
105°	309.3	315.5	320.6	329.8	292.9
107.5°	376.1	379.2	386.4	391.5	395.6
110°	443.9	447.0	453.2	455.2	458.3

TEST NUMBER: P1034026

CATALOG NUMBER: S124RDIW-B350D1050UB30-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	509.7	515.8	517.9	516.9	521.0
115°	577.5	580.6	579.5	581.6	581.6
117.5°	638.1	642.2	645.3	644.3	644.3
120°	699.8	703.9	702.8	704.9	702.8
122.5°	757.3	759.4	761.4	762.4	760.4
125°	811.8	815.9	813.8	816.9	817.9
127.5°	864.2	865.2	870.3	869.3	868.3
130°	914.5	915.6	918.6	919.7	919.7
132.5°	960.8	962.8	966.9	968.0	966.9
135°	1007.0	1006.0	1010.1	1012.1	1014.2
137.5°	1048.1	1048.1	1053.2	1055.3	1054.3
140°	1088.2	1090.2	1092.3	1095.4	1096.4
142.5°	1124.1	1128.3	1129.3	1131.3	1131.3
145°	1161.1	1164.2	1164.2	1165.3	1167.3
147.5°	1189.9	1196.1	1195.1	1196.1	1197.1
150°	1221.8	1225.9	1224.8	1224.8	1225.9
152.5°	1248.5	1251.6	1249.5	1251.6	1250.5
155°	1273.1	1274.2	1271.1	1275.2	1272.1
157.5°	1294.7	1294.7	1290.6	1295.8	1290.6
160°	1313.2	1310.1	1309.1	1315.3	1309.1
162.5°	1329.7	1325.6	1324.5	1330.7	1323.5
165°	1343.0	1337.9	1337.9	1346.1	1336.9
167.5°	1354.3	1349.2	1348.2	1357.4	1347.1
170°	1363.6	1357.4	1358.4	1366.7	1356.4
172.5°	1369.7	1363.6	1364.6	1372.8	1361.5
175°	1373.8	1367.7	1368.7	1378.0	1365.6
177.5°	1376.9	1369.7	1371.8	1380.0	1367.7
180°	1373.8	1373.8	1373.8	1373.8	1373.8

(END OF REPORT)