

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: P1034027

Luminaire Tested: S124RDIW-B350D1050UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034027
REPORT IS A COMBINATION OF REPORTS P1000283 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-F1
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

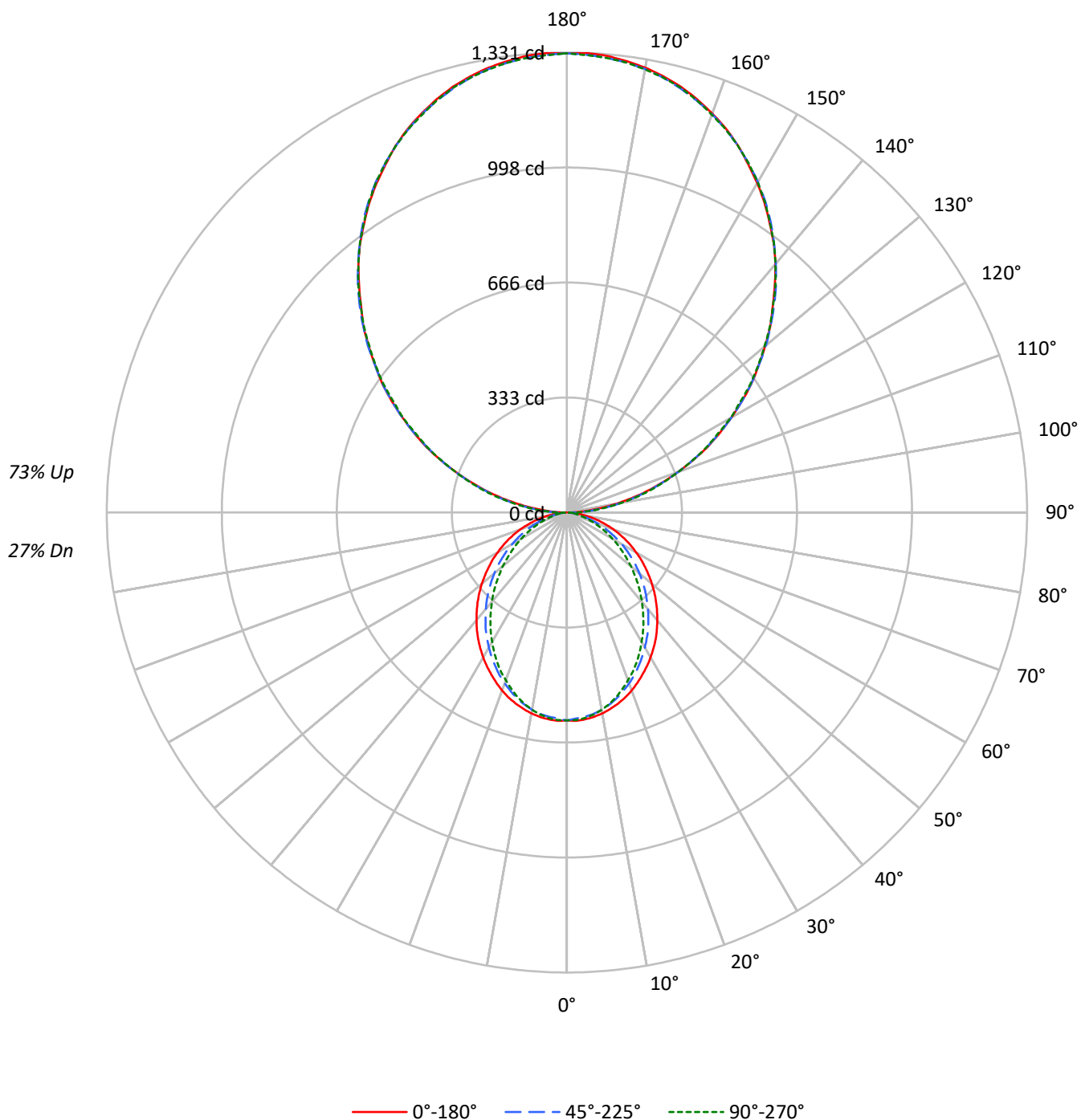
Lumens per Lamp: N/A
Luminaire Lumens: 5079.0 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35
1	93	89	85	82	83	79	76	74	62	60	58	46	45	44	31	31	30
2	85	78	72	67	75	70	65	61	55	51	48	41	39	37	28	27	26
3	77	68	61	56	69	61	55	51	48	44	41	36	33	31	25	23	22
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	22	20	19
5	65	54	46	40	58	48	42	37	38	33	30	29	26	23	20	18	17
6	60	48	40	35	53	43	37	32	34	30	26	26	23	20	18	16	15
7	55	43	36	30	49	39	32	28	31	26	23	24	20	18	17	15	13
8	51	39	32	27	45	35	29	24	28	24	20	22	18	16	15	13	12
9	47	36	28	24	42	32	26	22	26	21	18	20	17	14	14	12	10
10	44	33	26	21	39	30	23	19	24	19	16	18	15	13	13	11	10

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	1.1
10°-20°	157.7	3.1
20°-30°	227.7	4.5
30°-40°	258.1	5.1
40°-50°	249.2	4.9
50°-60°	207.2	4.1
60°-70°	143.0	2.8
70°-80°	72.3	1.4
80°-90°	21.2	0.4
90°-100°	86.6	1.7
100°-110°	259.4	5.1
110°-120°	440.6	8.7
120°-130°	581.1	11.4
130°-140°	652.7	12.9
140°-150°	641.5	12.6
150°-160°	539.5	10.6
160°-170°	359.0	7.1
170°-180°	125.7	2.5
0°-30°	442.0	8.7
0°-40°	700.1	13.8
0°-60°	1156.4	22.8
0°-90°	1392.8	27.4
90°-120°	786.6	15.5
90°-150°	2661.9	52.4
90°-180°	3686.0	72.6
0°-180°	5079.0	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	6
95°	62	71	78	81	81	67
105°	239	240	244	248	251	254
115°	448	448	446	445	444	442
125°	652	652	651	649	647	582
135°	842	848	848	846	842	651
145°	1022	1026	1028	1026	1023	640
155°	1171	1171	1170	1174	1170	539
165°	1275	1272	1270	1276	1272	360
175°	1326	1321	1320	1328	1320	126
180°	1328	1328	1328	1328	1328	

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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°	26.7	40.1	45.2	48.3	49.3
95°	61.6	70.9	78.1	81.2	81.2
97.5°	98.6	106.9	115.1	119.2	119.2
100°	143.8	148.0	157.2	159.3	159.3
102.5°	191.1	192.1	200.4	203.4	204.5
105°	239.4	240.4	244.5	247.6	250.7
107.5°	289.7	290.8	291.8	295.9	294.9
110°	341.1	343.2	342.1	340.1	343.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	394.5	394.5	392.5	392.5	392.5
115°	448.0	448.0	445.9	444.9	443.9
117.5°	498.3	498.3	497.3	494.2	491.1
120°	548.7	552.8	549.7	544.6	546.6
122.5°	601.1	602.1	601.1	598.0	592.9
125°	652.4	652.4	651.4	649.4	647.3
127.5°	698.7	701.8	699.7	697.7	696.6
130°	748.0	751.1	751.1	749.0	744.9
132.5°	798.3	800.4	799.4	797.3	796.3
135°	841.5	847.7	847.7	845.6	842.5
137.5°	889.8	892.9	894.9	891.8	892.9
140°	938.1	940.1	940.1	939.1	938.1
142.5°	982.3	984.3	983.3	983.3	983.3
145°	1022.3	1026.4	1027.5	1026.4	1023.4
147.5°	1063.4	1068.6	1067.5	1066.5	1065.5
150°	1100.4	1104.5	1104.5	1104.5	1103.5
152.5°	1135.4	1137.4	1138.4	1141.5	1138.4
155°	1171.3	1171.3	1170.3	1174.4	1170.3
157.5°	1202.1	1200.1	1200.1	1203.2	1200.1
160°	1228.9	1227.8	1226.8	1229.9	1224.7
162.5°	1253.5	1250.4	1249.4	1255.6	1250.4
165°	1275.1	1272.0	1270.0	1276.1	1272.0
167.5°	1292.6	1288.5	1288.5	1294.6	1288.5
170°	1306.9	1301.8	1302.8	1309.0	1301.8
172.5°	1317.2	1313.1	1313.1	1320.3	1313.1
175°	1326.5	1321.3	1320.3	1327.5	1320.3
177.5°	1330.6	1325.4	1325.4	1332.6	1324.4
180°	1328.5	1328.5	1328.5	1328.5	1328.5

(END OF REPORT)