

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: P1033387

Luminaire Tested: S124DIW-B350D1050UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033387
REPORT IS A COMBINATION OF REPORTS P997285 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1050UB27-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

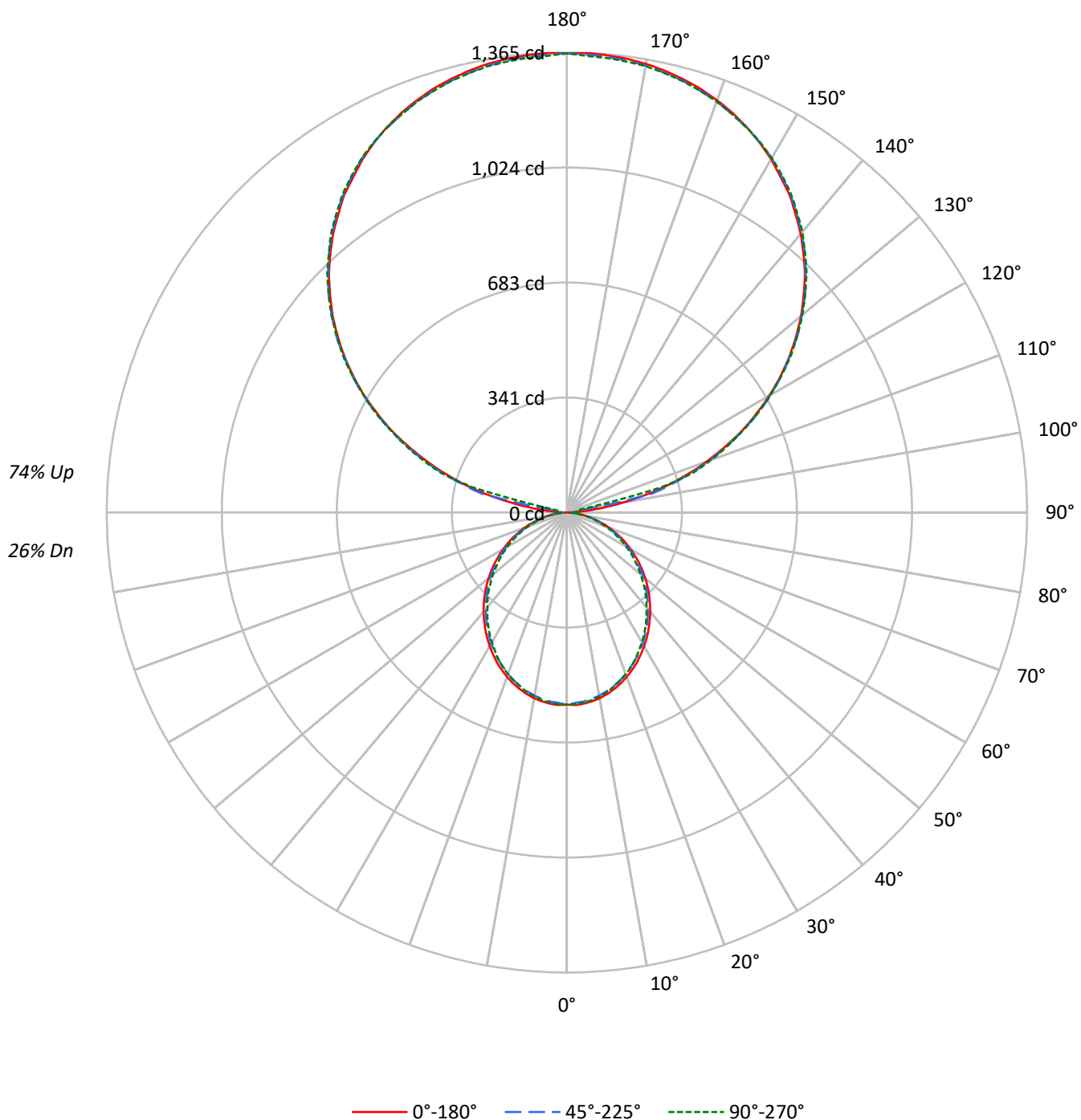
Lumens per Lamp: N/A
Luminaire Lumens: 5680.0 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34
1	92	88	84	81	82	79	76	73	61	59	57	45	44	42	30	29	29
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24
3	77	68	61	55	68	60	55	50	47	43	40	35	32	30	23	22	20
4	70	60	52	46	62	53	47	42	42	37	34	31	28	25	21	19	18
5	64	53	45	39	57	48	41	36	37	32	29	28	24	22	19	17	15
6	59	47	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13
7	54	43	35	30	48	38	32	27	30	25	22	23	19	17	15	13	12
8	50	39	31	26	45	35	28	24	27	23	19	21	17	15	14	12	11
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10
10	44	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4648	4648	4648
5°	4652	4514	4520
10°	4612	4389	4359
15°	4546	4240	4176
20°	4461	4079	3988
25°	4367	3909	3784
30°	4252	3724	3561
35°	4134	3536	3346
40°	4010	3333	3116
45°	3879	3129	2902
50°	3736	2932	2665
55°	3580	2702	2429
60°	3420	2450	2184
65°	3238	2189	1907
70°	3025	1876	1611
75°	2712	1511	1289
80°	2311	1093	907
85°	1797	607	488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3879 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	0.9
10°-20°	151.4	2.7
20°-30°	222.8	3.9
30°-40°	258.9	4.6
40°-50°	258.9	4.6
50°-60°	226.5	4.0
60°-70°	168.1	3.0
70°-80°	95.4	1.7
80°-90°	30.1	0.5
90°-100°	45.2	0.8
100°-110°	297.7	5.2
110°-120°	568.5	10.0
120°-130°	721.7	12.7
130°-140°	772.1	13.6
140°-150°	721.9	12.7
150°-160°	582.2	10.2
160°-170°	375.5	6.6
170°-180°	129.4	2.3
0°-30°	427.8	7.5
0°-40°	686.8	12.1
0°-60°	1172.2	20.6
0°-90°	1465.8	25.8
90°-120°	911.4	16.0
90°-150°	3127.1	55.1
90°-180°	4214.0	74.2
0°-180°	5680.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	570	568	563	568	567	54
15°	542	540	534	536	535	153
25°	491	488	481	482	480	226
35°	422	419	413	410	407	264
45°	345	342	334	329	328	266
55°	261	259	253	248	245	234
65°	177	174	170	165	163	175
75°	94	92	90	88	87	100
85°	25	25	24	24	23	27
90°	3	14	22	28	31	5
95°	56	21	22	28	30	69
105°	307	313	318	327	290	321
115°	572	576	574	576	576	563
125°	805	809	807	810	811	719
135°	998	997	1001	1003	1005	769
145°	1151	1154	1154	1155	1157	719
155°	1262	1263	1260	1264	1261	582
165°	1331	1326	1326	1334	1325	376
175°	1362	1356	1357	1366	1354	130
180°	1362	1362	1362	1362	1362	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	570.0	570.0	570.0	570.0	570.0
2.5°	571.8	570.5	565.4	570.0	569.5
5°	569.5	567.7	562.7	567.7	566.8
7.5°	565.4	563.6	558.1	562.2	561.8
10°	559.5	557.7	551.7	555.4	554.5
12.5°	551.7	549.9	543.5	547.6	546.2
15°	542.1	540.3	533.5	536.2	534.8
17.5°	531.2	528.9	522.5	524.3	523.4
20°	518.8	516.6	509.7	511.1	510.2
22.5°	505.6	502.4	495.5	498.3	496.5
25°	491.0	487.8	481.4	481.8	480.0
27.5°	474.5	471.3	465.4	464.5	462.2
30°	458.1	454.4	448.5	446.7	444.4
32.5°	440.7	437.5	431.1	428.9	426.6
35°	422.5	419.3	412.9	409.7	407.4
37.5°	403.3	400.5	393.7	390.5	387.3
40°	384.6	380.9	374.1	369.5	367.2
42.5°	364.5	362.6	354.9	349.4	348.0
45°	344.8	341.6	334.3	329.3	327.9
47.5°	324.3	322.0	315.1	309.7	306.0
50°	303.3	301.4	295.0	288.7	285.9
52.5°	282.7	280.4	273.6	268.1	264.4
55°	260.8	259.4	253.0	247.5	244.8
57.5°	240.2	238.9	232.5	227.0	224.3
60°	218.8	216.5	210.6	206.4	204.2
62.5°	197.8	195.9	189.5	185.9	183.6
65°	176.8	174.5	169.9	165.3	163.1
67.5°	155.3	153.5	148.9	144.3	143.9
70°	135.6	132.5	128.8	125.1	123.8
72.5°	114.6	111.4	108.7	106.0	104.6
75°	94.1	91.8	89.5	87.7	87.2
77.5°	74.0	73.1	70.8	70.3	69.0
80°	56.2	54.8	53.9	53.0	52.5
82.5°	38.8	38.4	38.4	37.9	37.5
85°	24.7	24.7	23.7	23.7	23.3
87.5°	11.9	11.4	11.0	11.0	11.0
90°	3.1	14.3	22.4	28.5	30.6
92.5°	15.3	13.2	21.4	27.5	27.5
95°	56.0	21.4	22.4	28.5	29.5
97.5°	107.0	129.4	22.4	27.5	28.5
100°	167.1	185.4	44.8	27.5	28.5
102.5°	234.3	246.5	258.7	29.5	29.5
105°	306.6	312.7	317.8	327.0	290.3
107.5°	372.8	375.9	383.0	388.1	392.2
110°	440.0	443.1	449.2	451.2	454.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	505.2	511.3	513.4	512.4	516.4
115°	572.5	575.5	574.5	576.5	576.5
117.5°	632.6	636.6	639.7	638.7	638.7
120°	693.7	697.8	696.7	698.8	696.7
122.5°	750.7	752.8	754.8	755.8	753.8
125°	804.7	808.8	806.7	809.8	810.8
127.5°	856.7	857.7	862.8	861.8	860.7
130°	906.6	907.6	910.6	911.7	911.7
132.5°	952.4	954.4	958.5	959.5	958.5
135°	998.2	997.2	1001.3	1003.3	1005.4
137.5°	1039.0	1039.0	1044.1	1046.1	1045.1
140°	1078.7	1080.8	1082.8	1085.9	1086.9
142.5°	1114.4	1118.4	1119.5	1121.5	1121.5
145°	1151.0	1154.1	1154.1	1155.1	1157.2
147.5°	1179.6	1185.7	1184.7	1185.7	1186.7
150°	1211.1	1215.2	1214.2	1214.2	1215.2
152.5°	1237.6	1240.7	1238.6	1240.7	1239.7
155°	1262.1	1263.1	1260.0	1264.1	1261.1
157.5°	1283.5	1283.5	1279.4	1284.5	1279.4
160°	1301.8	1298.7	1297.7	1303.8	1297.7
162.5°	1318.1	1314.0	1313.0	1319.1	1312.0
165°	1331.3	1326.2	1326.2	1334.4	1325.2
167.5°	1342.5	1337.4	1336.4	1345.6	1335.4
170°	1351.7	1345.6	1346.6	1354.8	1344.6
172.5°	1357.8	1351.7	1352.7	1360.9	1349.7
175°	1361.9	1355.8	1356.8	1366.0	1353.7
177.5°	1365.0	1357.8	1359.9	1368.0	1355.8
180°	1361.9	1361.9	1361.9	1361.9	1361.9

(END OF REPORT)