

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: P1033418

Luminaire Tested: S124DIW-B350D1340UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033418
REPORT IS A COMBINATION OF REPORTS P997352 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1340UB27-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

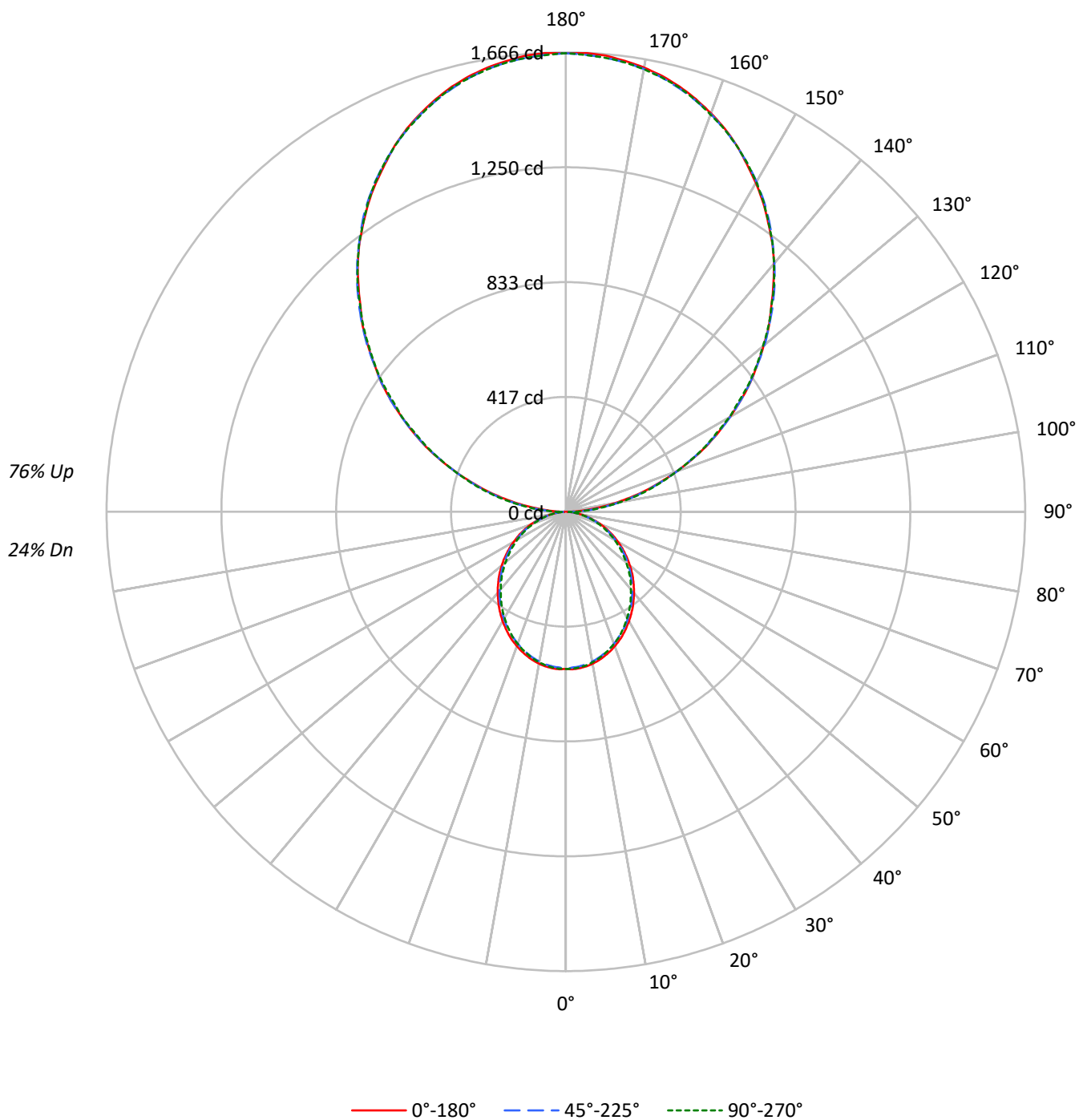
Lumens per Lamp: N/A
Luminaire Lumens: 6081.0 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
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: P1033418

CATALOG NUMBER: S124DIW-B350D1340UB27-4F0-XX-W2A-F1

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	69	69	69	50	50	50	32	32	32
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27
2	84	77	71	66	74	68	63	59	53	49	47	38	36	34	25	24	23
3	76	67	60	55	68	60	54	49	46	42	39	34	31	29	22	21	19
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17
5	64	53	45	39	56	47	41	36	37	32	28	27	24	21	18	16	15
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11
8	50	38	31	26	44	34	28	24	27	22	19	20	17	14	13	12	10
9	46	35	28	23	41	31	25	21	25	20	17	18	15	13	12	10	9
10	43	32	25	20	38	29	23	19	23	18	15	17	14	12	11	10	8

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

TEST NUMBER: P1033418

CATALOG NUMBER: S124DIW-B350D1340UB27-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	0.9
10°-20°	151.4	2.5
20°-30°	222.8	3.7
30°-40°	258.9	4.3
40°-50°	258.9	4.3
50°-60°	226.5	3.7
60°-70°	168.1	2.8
70°-80°	95.4	1.6
80°-90°	30.9	0.5
90°-100°	108.4	1.8
100°-110°	324.7	5.3
110°-120°	551.6	9.1
120°-130°	727.5	12.0
130°-140°	817.1	13.4
140°-150°	803.1	13.2
150°-160°	675.4	11.1
160°-170°	449.4	7.4
170°-180°	157.4	2.6
0°-30°	427.8	7.0
0°-40°	686.8	11.3
0°-60°	1172.2	19.3
0°-90°	1466.6	24.1
90°-120°	984.7	16.2
90°-150°	3332.3	54.8
90°-180°	4614.0	75.9
0°-180°	6081.0	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°	4	18	28	36	39	7
95°	77	89	98	102	102	84
105°	300	301	306	310	314	318
115°	561	561	558	557	556	553
125°	817	817	816	813	810	728
135°	1053	1061	1061	1059	1055	815
145°	1280	1285	1286	1285	1281	801
155°	1466	1466	1465	1470	1465	675
165°	1596	1592	1590	1598	1592	450
175°	1660	1654	1653	1662	1653	158
180°	1663	1663	1663	1663	1663	

TEST NUMBER: P1033418

CATALOG NUMBER: S124DIW-B350D1340UB27-4F0-XX-W2A-F1

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°	3.9	18.0	28.3	36.0	38.6
92.5°	33.4	50.2	56.6	60.5	61.7
95°	77.2	88.7	97.8	101.6	101.6
97.5°	123.5	133.8	144.1	149.2	149.2
100°	180.1	185.2	196.8	199.4	199.4
102.5°	239.2	240.5	250.8	254.7	256.0
105°	299.7	301.0	306.1	310.0	313.8
107.5°	362.7	364.0	365.3	370.4	369.1
110°	427.0	429.6	428.3	425.7	429.6

TEST NUMBER: P1033418

CATALOG NUMBER: S124DIW-B350D1340UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	493.9	493.9	491.3	491.3	491.3
115°	560.8	560.8	558.2	556.9	555.6
117.5°	623.8	623.8	622.5	618.7	614.8
120°	686.8	692.0	688.1	681.7	684.3
122.5°	752.4	753.7	752.4	748.6	742.1
125°	816.8	816.8	815.5	812.9	810.3
127.5°	874.6	878.5	875.9	873.3	872.1
130°	936.4	940.2	940.2	937.7	932.5
132.5°	999.4	1002.0	1000.7	998.1	996.8
135°	1053.4	1061.1	1061.1	1058.6	1054.7
137.5°	1113.9	1117.7	1120.3	1116.4	1117.7
140°	1174.3	1176.9	1176.9	1175.6	1174.3
142.5°	1229.6	1232.2	1230.9	1230.9	1230.9
145°	1279.8	1284.9	1286.2	1284.9	1281.1
147.5°	1331.2	1337.7	1336.4	1335.1	1333.8
150°	1377.5	1382.7	1382.7	1382.7	1381.4
152.5°	1421.3	1423.8	1425.1	1429.0	1425.1
155°	1466.3	1466.3	1465.0	1470.2	1465.0
157.5°	1504.9	1502.3	1502.3	1506.2	1502.3
160°	1538.3	1537.0	1535.7	1539.6	1533.2
162.5°	1569.2	1565.3	1564.0	1571.8	1565.3
165°	1596.2	1592.3	1589.8	1597.5	1592.3
167.5°	1618.1	1612.9	1612.9	1620.6	1612.9
170°	1636.1	1629.6	1630.9	1638.6	1629.6
172.5°	1648.9	1643.8	1643.8	1652.8	1643.8
175°	1660.5	1654.1	1652.8	1661.8	1652.8
177.5°	1665.7	1659.2	1659.2	1668.2	1657.9
180°	1663.1	1663.1	1663.1	1663.1	1663.1

(END OF REPORT)