

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: P1033424

Luminaire Tested: S124DIW-B350D1340UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033424
REPORT IS A COMBINATION OF REPORTS P997382 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1340UB30-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

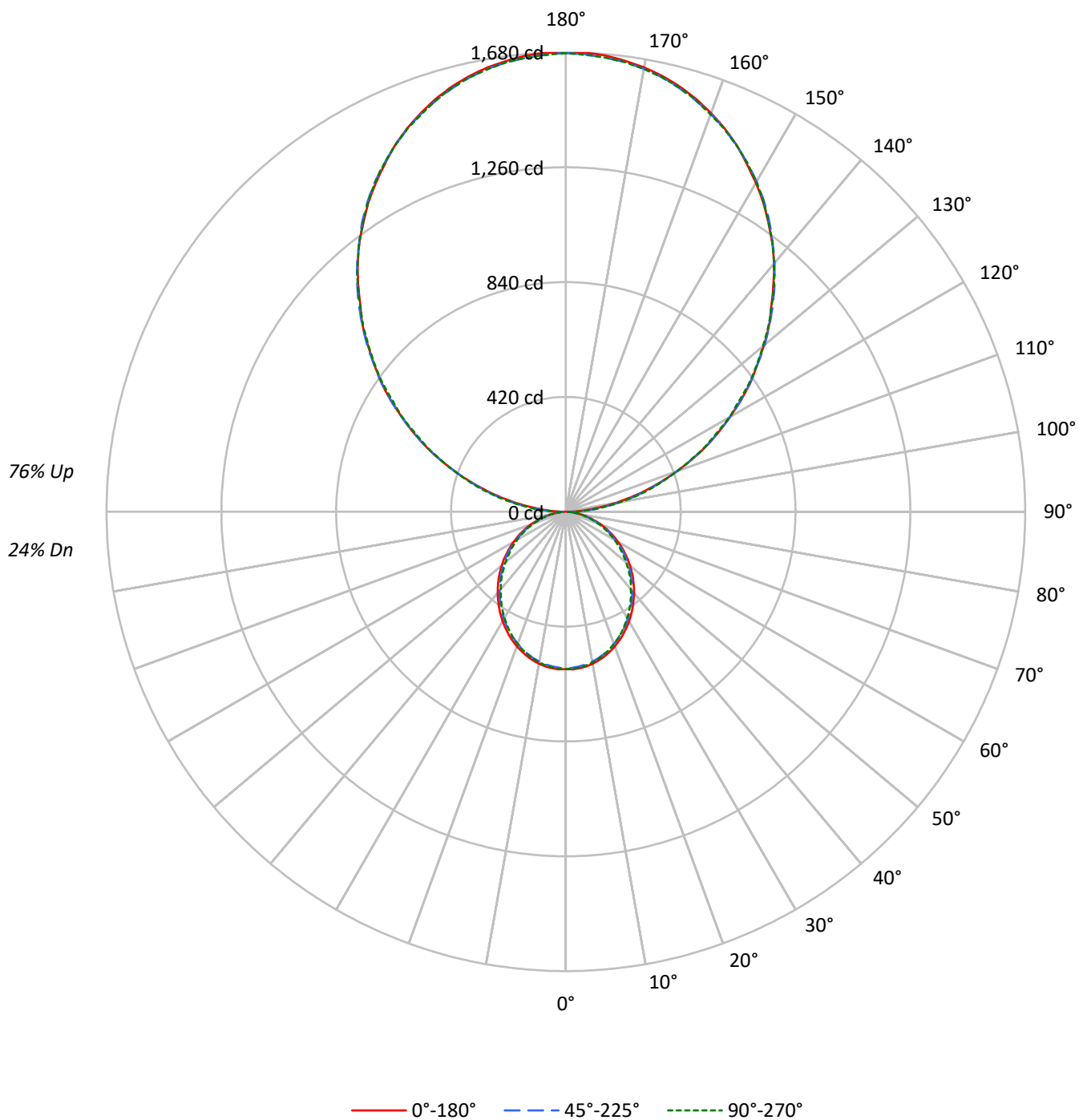
Lumens per Lamp: N/A
Luminaire Lumens: 6134.0 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	50	30	10
RCR																				
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32			24
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27			20
2	84	77	71	66	74	68	63	59	53	49	47	38	36	34	25	24	23			17
3	76	67	60	55	68	60	54	49	46	42	39	34	31	29	22	21	19			14
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17			12
5	64	53	45	39	56	47	41	36	37	32	28	27	24	21	18	16	15			11
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13			9
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11			8
8	50	38	31	26	44	34	28	24	27	22	19	20	17	14	13	12	10			7
9	46	35	28	23	41	31	25	21	25	20	17	18	15	13	12	10	9			7
10	43	32	25	20	38	29	23	19	23	18	15	17	14	12	11	10	8			6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4690	4690	4690
5°	4693	4555	4560
10°	4654	4428	4397
15°	4587	4278	4213
20°	4502	4115	4023
25°	4405	3944	3818
30°	4290	3758	3593
35°	4170	3567	3375
40°	4045	3363	3144
45°	3914	3157	2928
50°	3770	2959	2689
55°	3612	2726	2451
60°	3450	2471	2203
65°	3265	2209	1924
70°	3054	1892	1625
75°	2735	1525	1301
80°	2332	1103	916
85°	1812	615	493

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3914 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	0.9
10°-20°	152.7	2.5
20°-30°	224.7	3.7
30°-40°	261.2	4.3
40°-50°	261.2	4.3
50°-60°	228.5	3.7
60°-70°	169.6	2.8
70°-80°	96.2	1.6
80°-90°	31.2	0.5
90°-100°	109.3	1.8
100°-110°	327.5	5.3
110°-120°	556.4	9.1
120°-130°	733.8	12.0
130°-140°	824.1	13.4
140°-150°	810.0	13.2
150°-160°	681.3	11.1
160°-170°	453.3	7.4
170°-180°	158.7	2.6
0°-30°	431.6	7.0
0°-40°	692.9	11.3
0°-60°	1182.6	19.3
0°-90°	1479.6	24.1
90°-120°	993.2	16.2
90°-150°	3361.1	54.8
90°-180°	4654.0	75.9
0°-180°	6134.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	575	575	575	575	575	
5°	575	573	568	573	572	55
15°	547	545	538	541	540	154
25°	495	492	486	486	484	228
35°	426	423	416	413	411	267
45°	348	345	337	332	331	268
55°	263	262	255	250	247	236
65°	178	176	171	167	164	176
75°	95	93	90	88	88	101
85°	25	25	24	24	24	27
90°	4	18	28	36	39	7
95°	78	90	99	102	102	84
105°	302	304	309	313	317	321
115°	566	566	563	562	560	558
125°	824	824	822	820	817	734
135°	1062	1070	1070	1068	1064	822
145°	1291	1296	1297	1296	1292	808
155°	1479	1479	1478	1483	1478	681
165°	1610	1606	1604	1611	1606	454
175°	1675	1668	1667	1676	1667	159
180°	1678	1678	1678	1678	1678	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	575.1	575.1	575.1	575.1	575.1
2.5°	576.9	575.5	570.5	575.1	574.6
5°	574.6	572.8	567.7	572.8	571.8
7.5°	570.5	568.6	563.1	567.2	566.8
10°	564.5	562.6	556.6	560.3	559.4
12.5°	556.6	554.8	548.3	552.5	551.1
15°	547.0	545.1	538.2	541.0	539.6
17.5°	535.9	533.6	527.1	529.0	528.1
20°	523.5	521.1	514.2	515.6	514.7
22.5°	510.1	506.9	500.0	502.7	500.9
25°	495.3	492.1	485.7	486.1	484.3
27.5°	478.8	475.5	469.5	468.6	466.3
30°	462.2	458.5	452.5	450.6	448.3
32.5°	444.7	441.4	435.0	432.7	430.4
35°	426.2	423.0	416.5	413.3	411.0
37.5°	406.9	404.1	397.2	394.0	390.7
40°	388.0	384.3	377.4	372.8	370.5
42.5°	367.7	365.9	358.0	352.5	351.1
45°	347.9	344.7	337.3	332.2	330.8
47.5°	327.2	324.9	317.9	312.4	308.7
50°	306.0	304.1	297.7	291.2	288.5
52.5°	285.2	282.9	276.0	270.5	266.8
55°	263.1	261.7	255.3	249.7	247.0
57.5°	242.4	241.0	234.5	229.0	226.2
60°	220.7	218.4	212.4	208.3	206.0
62.5°	199.5	197.7	191.2	187.5	185.2
65°	178.3	176.0	171.4	166.8	164.5
67.5°	156.7	154.8	150.2	145.6	145.1
70°	136.9	133.6	129.9	126.3	124.9
72.5°	115.7	112.4	109.7	106.9	105.5
75°	94.9	92.6	90.3	88.5	88.0
77.5°	74.6	73.7	71.4	71.0	69.6
80°	56.7	55.3	54.4	53.5	53.0
82.5°	39.2	38.7	38.7	38.2	37.8
85°	24.9	24.9	24.0	24.0	23.5
87.5°	12.0	11.5	11.1	11.1	11.1
90°	3.9	18.2	28.5	36.3	38.9
92.5°	33.7	50.6	57.1	61.0	62.3
95°	77.8	89.5	98.6	102.5	102.5
97.5°	124.5	134.9	145.3	150.5	150.5
100°	181.6	186.8	198.5	201.1	201.1
102.5°	241.3	242.6	253.0	256.9	258.2
105°	302.3	303.6	308.8	312.7	316.6
107.5°	365.9	367.2	368.5	373.6	372.3
110°	430.7	433.3	432.0	429.4	433.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	498.2	498.2	495.6	495.6	495.6
115°	565.6	565.6	563.1	561.8	560.5
117.5°	629.2	629.2	627.9	624.0	620.1
120°	692.8	698.0	694.1	687.6	690.2
122.5°	759.0	760.3	759.0	755.1	748.6
125°	823.8	823.8	822.5	819.9	817.3
127.5°	882.2	886.1	883.5	880.9	879.6
130°	944.5	948.4	948.4	945.8	940.6
132.5°	1008.0	1010.6	1009.3	1006.8	1005.5
135°	1062.5	1070.3	1070.3	1067.7	1063.8
137.5°	1123.5	1127.4	1130.0	1126.1	1127.4
140°	1184.5	1187.1	1187.1	1185.8	1184.5
142.5°	1240.3	1242.9	1241.6	1241.6	1241.6
145°	1290.9	1296.1	1297.4	1296.1	1292.2
147.5°	1342.8	1349.3	1348.0	1346.7	1345.4
150°	1389.5	1394.7	1394.7	1394.7	1393.4
152.5°	1433.6	1436.2	1437.5	1441.4	1437.5
155°	1479.0	1479.0	1477.7	1482.9	1477.7
157.5°	1517.9	1515.3	1515.3	1519.2	1515.3
160°	1551.6	1550.3	1549.0	1552.9	1546.5
162.5°	1582.8	1578.9	1577.6	1585.4	1578.9
165°	1610.0	1606.1	1603.5	1611.3	1606.1
167.5°	1632.1	1626.9	1626.9	1634.7	1626.9
170°	1650.2	1643.8	1645.1	1652.8	1643.8
172.5°	1663.2	1658.0	1658.0	1667.1	1658.0
175°	1674.9	1668.4	1667.1	1676.2	1667.1
177.5°	1680.1	1673.6	1673.6	1682.7	1672.3
180°	1677.5	1677.5	1677.5	1677.5	1677.5

(END OF REPORT)