

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: P1033454

Luminaire Tested: S124DIW-B350D1560UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033454
REPORT IS A COMBINATION OF REPORTS P997448 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1560UB30-4F0-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

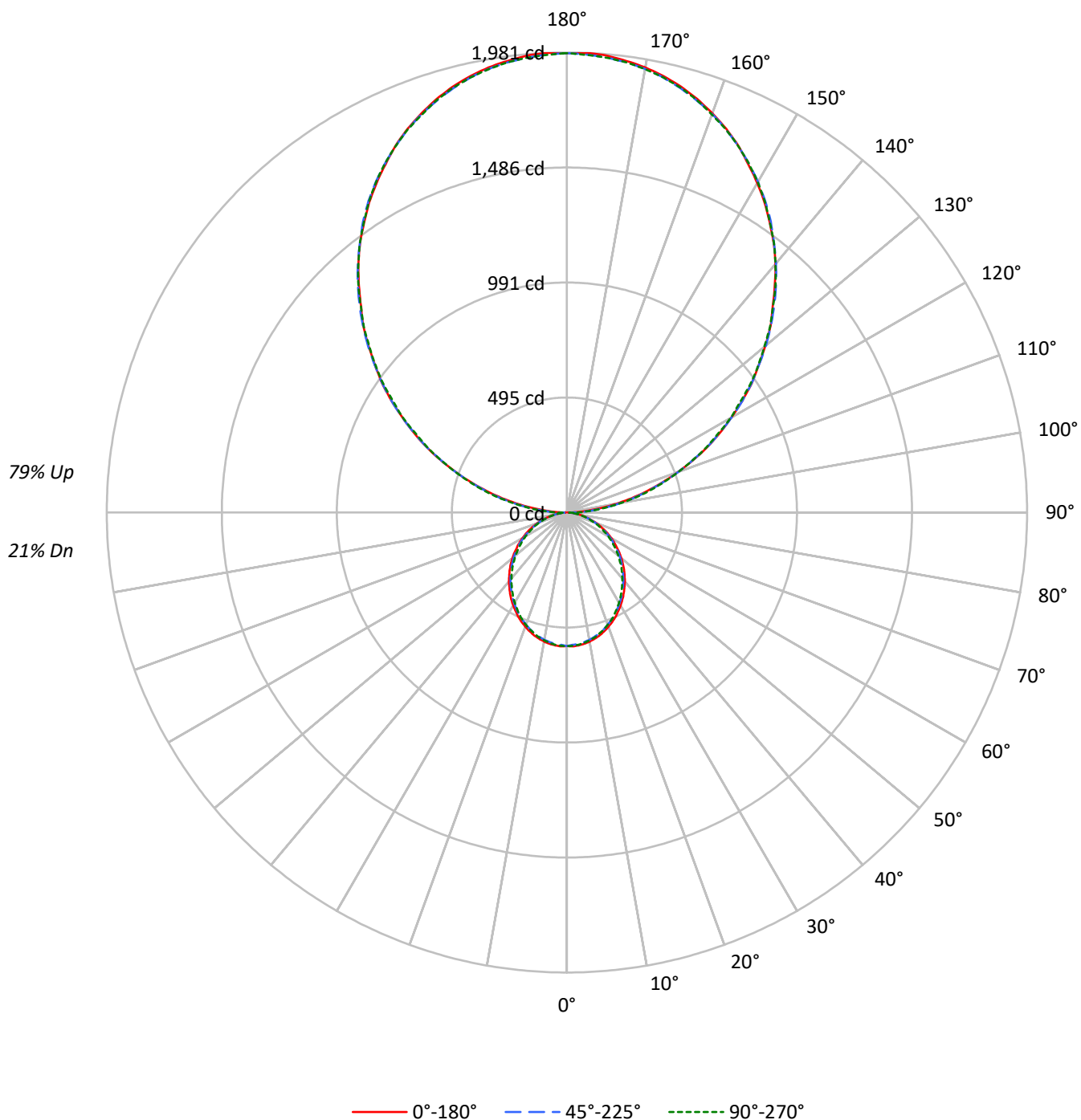
Lumens per Lamp: N/A
Luminaire Lumens: 6969.0 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 65.2
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: P1033454

CATALOG NUMBER: S124DIW-B350D1560UB30-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1033454

CATALOG NUMBER: S124DIW-B350D1560UB30-4F0-XX-W2A-F1

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	30	30	21
1	91	87	83	80	81	77	74	71	59	57	55	42	41	39	26	26	25	25	25	18
2	83	76	70	65	73	67	63	59	51	48	45	37	35	33	23	22	21	21	21	15
3	76	67	60	54	67	59	53	49	45	41	38	32	30	28	20	19	18	18	18	13
4	69	59	51	46	61	52	46	41	40	36	32	29	26	24	18	17	15	15	15	11
5	63	52	45	39	56	47	40	35	36	31	28	26	23	20	16	15	13	13	13	9
6	58	47	39	33	51	42	35	30	32	27	24	23	20	18	15	13	12	12	12	8
7	54	42	34	29	47	37	31	26	29	24	21	21	18	16	13	12	10	10	10	7
8	50	38	31	26	44	34	28	23	26	22	18	19	16	14	12	11	9	9	9	7
9	46	34	27	23	41	31	25	20	24	19	16	17	14	12	11	10	8	8	8	6
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	10	9	7	7	7	5

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

TEST NUMBER: P1033454

CATALOG NUMBER: S124DIW-B350D1560UB30-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	0.8
10°-20°	152.7	2.2
20°-30°	224.7	3.2
30°-40°	261.2	3.7
40°-50°	261.2	3.7
50°-60°	228.5	3.3
60°-70°	169.6	2.4
70°-80°	96.2	1.4
80°-90°	31.8	0.5
90°-100°	129.0	1.9
100°-110°	386.2	5.5
110°-120°	656.1	9.4
120°-130°	865.3	12.4
130°-140°	971.9	13.9
140°-150°	955.2	13.7
150°-160°	803.4	11.5
160°-170°	534.5	7.7
170°-180°	187.2	2.7
0°-30°	431.6	6.2
0°-40°	692.9	9.9
0°-60°	1182.6	17.0
0°-90°	1480.2	21.2
90°-120°	1171.3	16.8
90°-150°	3963.7	56.9
90°-180°	5489.0	78.8
0°-180°	6969.0	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°	5	21	34	43	46	8
95°	92	106	116	121	121	99
105°	356	358	364	369	373	378
115°	667	667	664	662	661	658
125°	972	972	970	967	964	866
135°	1253	1262	1262	1259	1254	969
145°	1522	1528	1530	1528	1524	953
155°	1744	1744	1743	1749	1743	803
165°	1899	1894	1891	1900	1894	535
175°	1975	1968	1966	1977	1966	188
180°	1978	1978	1978	1978	1978	

TEST NUMBER: P1033454

CATALOG NUMBER: S124DIW-B350D1560UB30-4F0-XX-W2A-F1

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°	4.6	21.4	33.7	42.8	45.9
92.5°	39.8	59.7	67.3	71.9	73.4
95°	91.8	105.6	116.3	120.9	120.9
97.5°	146.9	159.1	171.4	177.5	177.5
100°	214.2	220.3	234.1	237.1	237.1
102.5°	284.6	286.1	298.3	302.9	304.5
105°	356.5	358.0	364.1	368.7	373.3
107.5°	431.4	433.0	434.5	440.6	439.1
110°	507.9	511.0	509.5	506.4	511.0

TEST NUMBER: P1033454

CATALOG NUMBER: S124DIW-B350D1560UB30-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	587.5	587.5	584.4	584.4	584.4
115°	667.0	667.0	664.0	662.5	660.9
117.5°	742.0	742.0	740.5	735.9	731.3
120°	817.0	823.1	818.5	810.9	813.9
122.5°	895.0	896.5	895.0	890.4	882.8
125°	971.5	971.5	970.0	966.9	963.9
127.5°	1040.4	1044.9	1041.9	1038.8	1037.3
130°	1113.8	1118.4	1118.4	1115.3	1109.2
132.5°	1188.8	1191.8	1190.3	1187.2	1185.7
135°	1253.0	1262.2	1262.2	1259.1	1254.5
137.5°	1324.9	1329.5	1332.6	1328.0	1329.5
140°	1396.8	1399.9	1399.9	1398.4	1396.8
142.5°	1462.6	1465.7	1464.1	1464.1	1464.1
145°	1522.3	1528.4	1529.9	1528.4	1523.8
147.5°	1583.5	1591.1	1589.6	1588.1	1586.5
150°	1638.6	1644.7	1644.7	1644.7	1643.1
152.5°	1690.6	1693.6	1695.2	1699.8	1695.2
155°	1744.1	1744.1	1742.6	1748.7	1742.6
157.5°	1790.0	1787.0	1787.0	1791.5	1787.0
160°	1829.8	1828.3	1826.7	1831.3	1823.7
162.5°	1866.5	1861.9	1860.4	1869.6	1861.9
165°	1898.6	1894.1	1891.0	1900.2	1894.1
167.5°	1924.7	1918.5	1918.5	1927.7	1918.5
170°	1946.1	1938.4	1939.9	1949.1	1938.4
172.5°	1961.4	1955.2	1955.2	1966.0	1955.2
175°	1975.1	1967.5	1966.0	1976.7	1966.0
177.5°	1981.3	1973.6	1973.6	1984.3	1972.1
180°	1978.2	1978.2	1978.2	1978.2	1978.2

(END OF REPORT)