

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: P1033613

Luminaire Tested: S124DIW-B575D1560UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033613
REPORT IS A COMBINATION OF REPORTS P997801 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1560UB50-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

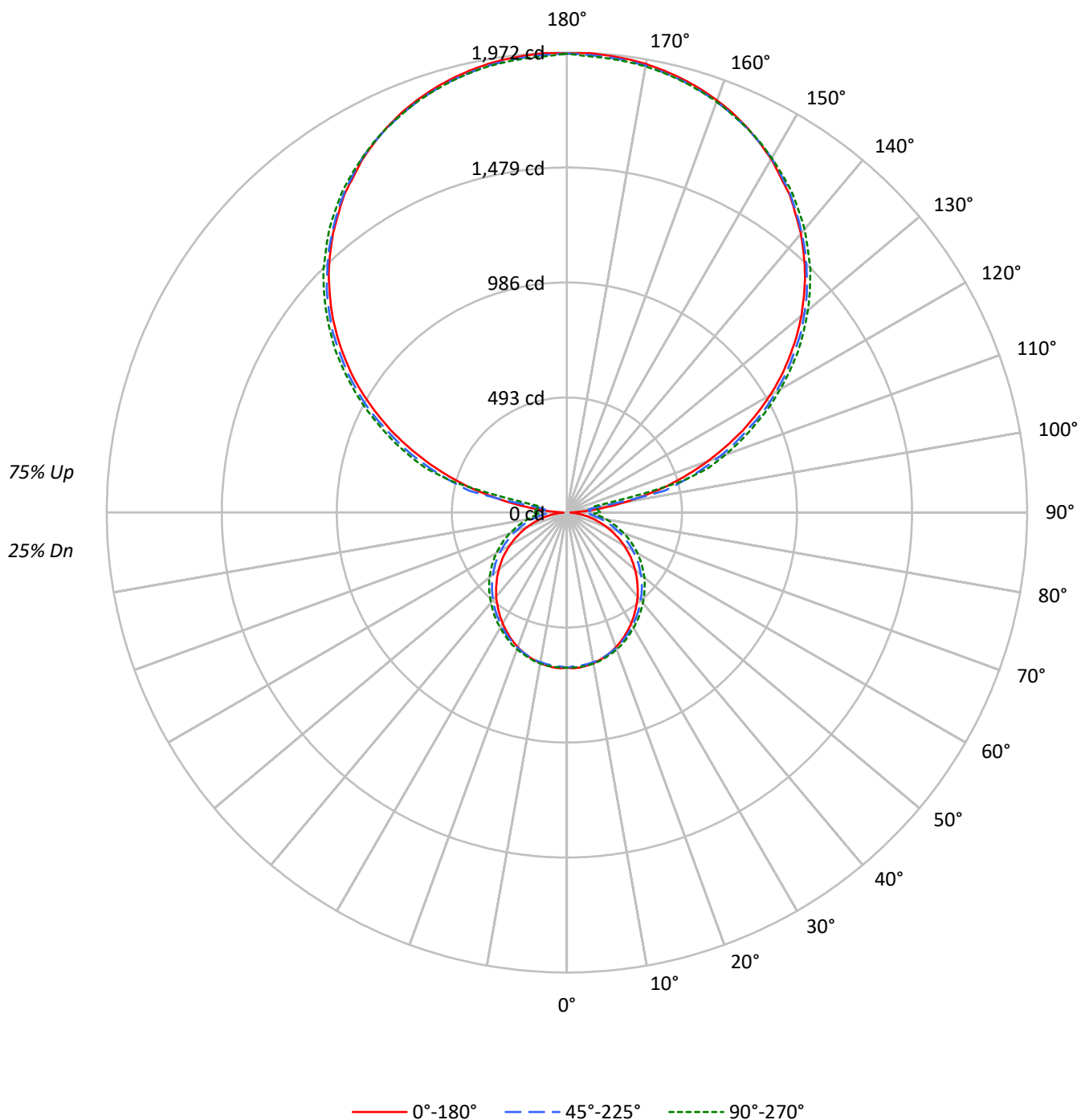
Lumens per Lamp: N/A
Luminaire Lumens: 8360.0 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 76.2
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

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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	33	33	33
1	92	87	83	80	81	78	75	72	60	58	56	44	42	41	29	28	27
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22
3	76	66	59	54	67	59	53	48	46	42	38	33	31	28	22	20	19
4	69	59	51	45	61	52	46	41	40	36	32	30	26	24	19	17	16
5	63	52	44	38	56	46	40	35	36	31	27	26	23	21	17	15	14
6	58	46	38	33	51	41	35	30	32	27	24	24	20	18	16	14	12
7	54	42	34	28	47	37	31	26	29	24	21	21	18	16	14	12	11
8	50	38	30	25	44	34	27	23	26	22	18	19	16	14	13	11	9
9	46	34	27	22	41	31	24	20	24	19	16	18	15	12	12	10	8
10	43	31	24	19	38	28	22	18	22	17	14	16	13	11	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5427	5427	5427
5°	5442	5285	5295
10°	5406	5182	5167
15°	5356	5065	5022
20°	5281	4938	4881
25°	5197	4798	4729
30°	5105	4660	4575
35°	5001	4518	4437
40°	4918	4383	4294
45°	4796	4255	4168
50°	4691	4111	4036
55°	4583	3972	3883
60°	4416	3798	3738
65°	4230	3611	3565
70°	4007	3397	3364
75°	3694	3160	3173
80°	3340	2916	2975
85°	2874	2673	2811

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 5317 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	0.8
10°-20°	180.7	2.2
20°-30°	273.2	3.3
30°-40°	330.5	4.0
40°-50°	349.4	4.2
50°-60°	328.8	3.9
60°-70°	272.9	3.3
70°-80°	191.5	2.3
80°-90°	112.0	1.3
90°-100°	129.6	1.5
100°-110°	477.6	5.7
110°-120°	853.1	10.2
120°-130°	1060.4	12.7
130°-140°	1122.9	13.4
140°-150°	1044.3	12.5
150°-160°	840.9	10.1
160°-170°	542.3	6.5
170°-180°	186.9	2.2
0°-30°	516.9	6.2
0°-40°	847.4	10.1
0°-60°	1525.6	18.2
0°-90°	2102.0	25.1
90°-120°	1460.3	17.5
90°-150°	4687.9	56.1
90°-180°	6258.0	74.9
0°-180°	8360.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	666	666	666	666	666	
5°	666	664	659	665	664	63
15°	639	639	637	644	643	180
25°	584	589	591	599	600	269
35°	511	520	528	538	540	320
45°	426	440	455	467	471	329
55°	334	350	372	387	391	298
65°	231	255	280	299	305	229
75°	128	156	187	208	215	136
85°	40	71	104	127	134	41
90°	16	62	106	137	146	12
95°	91	65	97	126	134	107
105°	450	473	508	540	493	471
115°	831	842	865	884	889	819
125°	1165	1170	1186	1205	1211	1041
135°	1443	1442	1453	1468	1475	1112
145°	1663	1667	1667	1673	1679	1039
155°	1823	1824	1820	1826	1822	841
165°	1923	1916	1916	1927	1914	543
175°	1967	1958	1960	1973	1955	187
180°	1967	1967	1967	1967	1967	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	665.5	665.5	665.5	665.5	665.5
2.5°	668.5	666.3	660.3	665.5	664.8
5°	666.3	664.0	658.8	664.8	664.0
7.5°	661.8	660.3	655.8	662.5	661.8
10°	655.8	655.1	651.4	658.1	657.3
12.5°	647.6	647.6	645.4	651.4	651.4
15°	638.7	639.4	637.2	643.9	643.2
17.5°	626.8	629.0	628.2	635.0	634.2
20°	614.1	616.3	617.1	624.5	624.5
22.5°	599.9	602.9	604.4	611.9	613.3
25°	584.3	588.7	591.0	599.2	599.9
27.5°	567.1	573.8	576.8	584.3	585.0
30°	550.0	556.0	561.2	569.4	570.9
32.5°	531.4	538.8	544.8	554.5	556.0
35°	511.2	520.2	527.6	538.1	540.3
37.5°	491.1	501.6	510.5	520.9	523.2
40°	471.7	481.4	491.9	503.0	506.0
42.5°	449.4	460.6	473.2	485.9	488.1
45°	426.3	440.4	454.6	467.3	471.0
47.5°	404.7	418.8	435.2	447.9	452.4
50°	380.8	397.2	413.6	428.5	433.0
52.5°	357.0	373.4	392.7	407.7	412.1
55°	333.9	349.5	371.9	386.8	391.3
57.5°	307.8	327.2	348.8	366.7	370.4
60°	282.5	301.8	326.4	343.6	349.5
62.5°	257.9	279.5	304.1	321.2	327.2
65°	231.0	254.9	280.2	298.8	304.8
67.5°	205.7	231.0	257.9	276.5	282.5
70°	179.6	204.9	233.3	253.4	258.6
72.5°	154.3	180.4	210.9	230.3	236.2
75°	128.2	155.8	187.1	207.9	214.6
77.5°	103.6	132.7	165.4	186.3	193.8
80°	81.2	111.0	143.8	166.2	172.2
82.5°	58.9	90.2	123.0	146.1	152.8
85°	39.5	70.8	104.3	126.7	134.1
87.5°	24.6	55.1	87.9	109.6	116.3
90°	16.3	62.3	106.2	136.6	145.5
92.5°	33.3	56.4	100.2	129.9	135.8
95°	90.6	65.2	97.2	126.2	134.4
97.5°	163.4	217.5	93.5	120.2	128.4
100°	249.5	295.4	121.3	116.5	123.2
102.5°	346.6	380.7	426.6	115.0	121.0
105°	449.6	473.3	508.2	540.1	493.1
107.5°	545.2	562.3	598.7	624.7	635.7
110°	641.6	656.4	691.3	711.4	721.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	735.0	752.8	780.3	795.2	807.0
115°	831.4	842.5	864.8	884.1	889.3
117.5°	918.2	928.5	955.3	969.5	975.4
120°	1005.6	1013.8	1034.0	1051.8	1054.8
122.5°	1088.0	1091.0	1114.0	1130.5	1132.8
125°	1165.3	1170.4	1186.2	1204.7	1210.6
127.5°	1240.4	1241.0	1263.3	1275.3	1279.0
130°	1311.6	1312.4	1328.7	1343.6	1348.1
132.5°	1377.9	1380.1	1394.9	1409.1	1412.1
135°	1443.4	1441.9	1453.0	1467.8	1475.3
137.5°	1502.2	1501.4	1511.8	1525.9	1528.1
140°	1559.6	1561.7	1565.5	1579.6	1584.8
142.5°	1610.3	1616.2	1616.9	1628.1	1631.1
145°	1663.3	1667.0	1667.0	1672.9	1678.9
147.5°	1704.5	1712.6	1711.1	1713.3	1717.8
150°	1750.1	1755.2	1753.8	1753.8	1755.2
152.5°	1787.6	1792.0	1789.1	1792.0	1790.6
155°	1822.9	1824.4	1820.0	1825.9	1821.5
157.5°	1853.8	1853.8	1847.9	1855.3	1847.9
160°	1880.3	1875.9	1874.4	1883.2	1874.4
162.5°	1903.8	1898.0	1896.5	1905.3	1895.0
165°	1923.0	1915.6	1915.6	1927.4	1914.1
167.5°	1939.2	1931.8	1930.3	1943.6	1928.9
170°	1952.4	1943.6	1945.0	1956.8	1942.1
172.5°	1961.2	1952.4	1953.9	1965.6	1949.5
175°	1967.1	1958.3	1959.8	1973.0	1955.3
177.5°	1971.5	1961.2	1964.2	1975.9	1958.3
180°	1967.1	1967.1	1967.1	1967.1	1967.1

(END OF REPORT)