

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: P1033614

Luminaire Tested: S124DIW-B575D1560UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033614
REPORT IS A COMBINATION OF REPORTS P997802 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-D1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

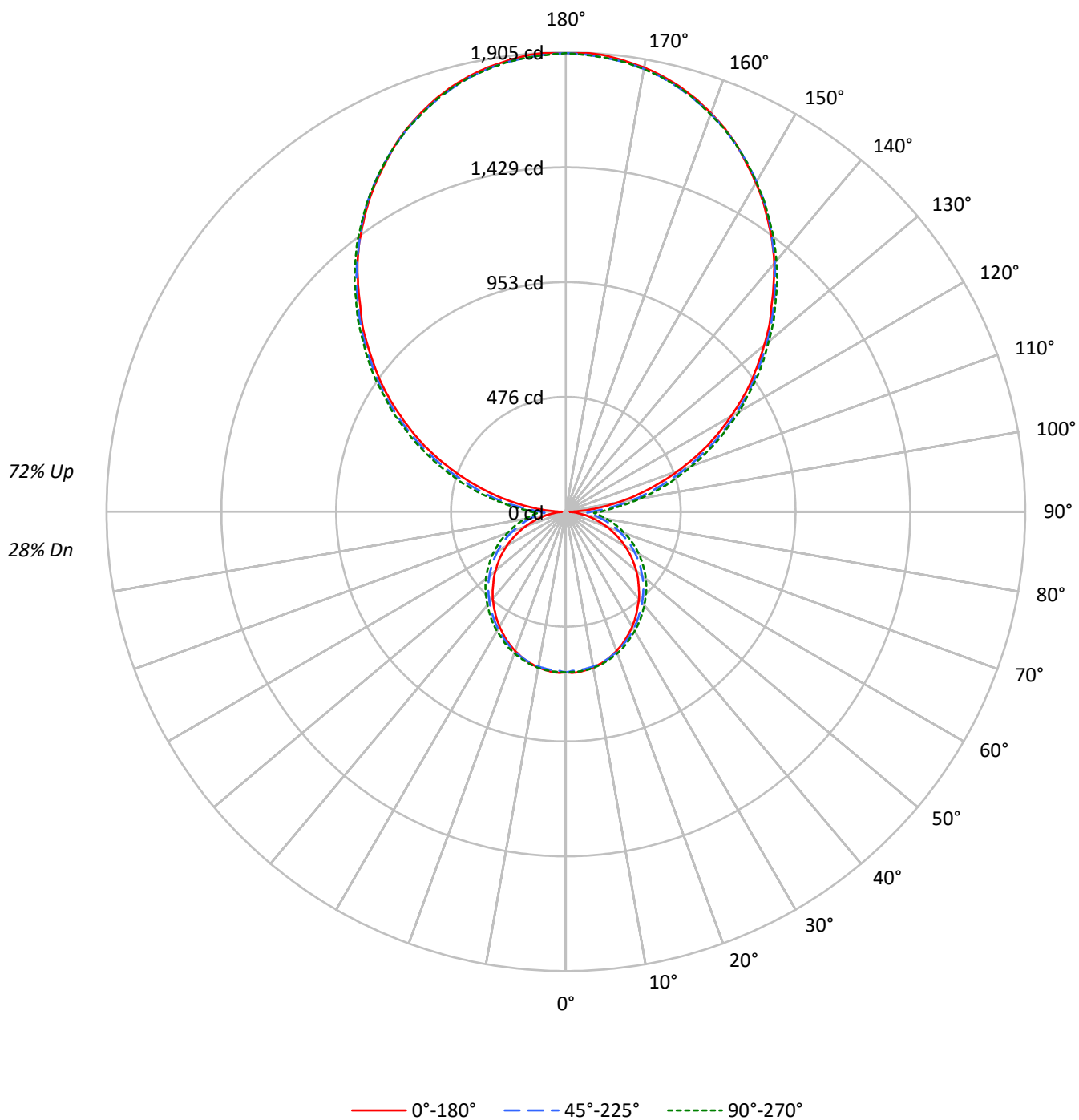
Lumens per Lamp: N/A
Luminaire Lumens: 7551.0 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1033614

CATALOG NUMBER: S124DIW-B575D1560UB50-4F0-XX-W2A-D1

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	92	88	84	80	82	79	75	72	61	59	57	45	44	43	31	30	29
2	84	76	70	65	74	68	63	59	53	50	47	39	37	35	27	25	24
3	76	67	60	54	68	60	54	49	47	42	39	35	32	29	23	22	20
4	69	59	51	45	62	53	46	41	41	37	33	31	27	25	21	19	17
5	64	52	44	38	57	47	40	35	37	32	28	27	24	21	19	16	15
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11
8	50	38	30	25	44	34	27	23	27	22	19	20	17	14	14	12	10
9	46	34	27	22	41	31	25	20	25	20	16	19	15	13	13	11	9
10	43	31	24	20	38	28	22	18	23	18	15	17	14	11	12	10	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

TEST NUMBER: P1033614

CATALOG NUMBER: S124DIW-B575D1560UB50-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	0.8
10°-20°	180.7	2.4
20°-30°	273.2	3.6
30°-40°	330.5	4.4
40°-50°	349.4	4.6
50°-60°	328.8	4.4
60°-70°	272.9	3.6
70°-80°	191.5	2.5
80°-90°	112.0	1.5
90°-100°	188.3	2.5
100°-110°	419.0	5.5
110°-120°	662.8	8.8
120°-130°	850.0	11.3
130°-140°	942.3	12.5
140°-150°	920.1	12.2
150°-160°	772.5	10.2
160°-170°	514.0	6.8
170°-180°	180.0	2.4
0°-30°	516.9	6.8
0°-40°	847.4	11.2
0°-60°	1525.6	20.2
0°-90°	2102.0	27.8
90°-120°	1270.1	16.8
90°-150°	3982.5	52.7
90°-180°	5449.0	72.2
0°-180°	7551.0	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	15
95°	98	136	177	201	208	103
105°	350	366	399	422	433	371
115°	646	653	674	688	692	637
125°	937	936	954	965	966	836
135°	1206	1215	1220	1229	1230	934
145°	1464	1470	1471	1474	1473	917
155°	1677	1677	1676	1682	1676	772
165°	1826	1821	1818	1827	1821	515
175°	1899	1892	1890	1901	1890	180
180°	1902	1902	1902	1902	1902	

TEST NUMBER: P1033614

CATALOG NUMBER: S124DIW-B575D1560UB50-4F0-XX-W2A-D1

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°	49.5	94.7	134.0	159.3	166.7
95°	98.0	135.8	176.6	201.2	207.9
97.5°	150.1	183.6	225.9	251.2	257.9
100°	214.2	239.4	281.7	304.8	310.0
102.5°	281.8	299.7	339.8	363.6	371.1
105°	349.5	365.9	399.3	422.3	432.8
107.5°	421.6	435.7	463.3	487.8	491.5
110°	494.4	507.8	532.4	546.6	557.0

TEST NUMBER: P1033614

CATALOG NUMBER: S124DIW-B575D1560UB50-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	570.1	579.1	600.8	617.1	623.1
115°	645.9	652.6	673.5	688.4	692.1
117.5°	718.0	722.4	743.3	754.6	756.1
120°	789.3	797.5	814.7	822.2	831.1
122.5°	864.3	865.8	884.4	895.0	892.9
125°	937.2	936.4	953.6	964.8	966.3
127.5°	1003.4	1007.0	1019.0	1029.5	1033.2
130°	1073.2	1076.9	1088.8	1099.3	1097.9
132.5°	1145.3	1147.5	1155.0	1164.7	1167.7
135°	1206.4	1215.2	1220.4	1229.4	1229.5
137.5°	1275.5	1279.1	1285.1	1291.9	1297.0
140°	1344.7	1346.8	1347.6	1355.8	1358.1
142.5°	1407.1	1410.1	1407.9	1416.1	1419.1
145°	1464.5	1469.7	1471.2	1474.2	1472.8
147.5°	1523.4	1530.0	1528.5	1527.8	1529.3
150°	1576.3	1581.5	1581.5	1581.5	1580.0
152.5°	1625.6	1628.6	1630.0	1634.5	1630.0
155°	1677.1	1677.1	1675.7	1681.5	1675.7
157.5°	1721.3	1718.3	1718.3	1722.7	1718.3
160°	1759.5	1758.0	1756.6	1761.0	1753.6
162.5°	1794.8	1790.4	1788.9	1797.8	1790.4
165°	1825.7	1821.3	1818.4	1827.2	1821.3
167.5°	1850.7	1844.8	1844.8	1853.7	1844.8
170°	1871.3	1864.0	1865.4	1874.3	1864.0
172.5°	1886.0	1880.1	1880.1	1890.4	1880.1
175°	1899.3	1891.9	1890.4	1900.7	1890.4
177.5°	1905.2	1897.8	1897.8	1908.1	1896.3
180°	1902.2	1902.2	1902.2	1902.2	1902.2

(END OF REPORT)