

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: P1033609

Luminaire Tested: S124DIW-B575D1560UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033609
REPORT IS A COMBINATION OF REPORTS P997793 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1560UB40-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

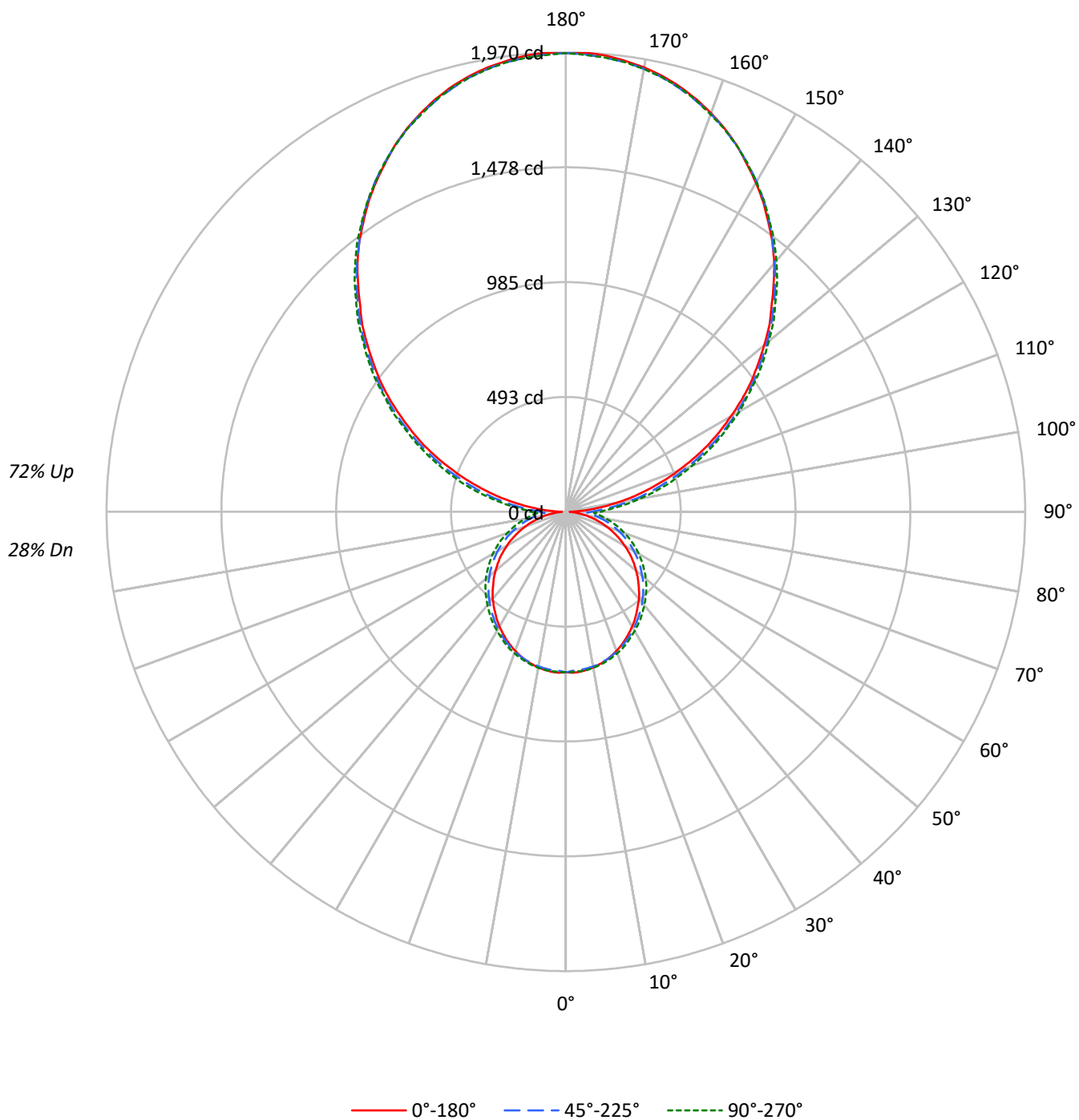
Lumens per Lamp: N/A
Luminaire Lumens: 7808.0 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	50	30	10
RCR																				
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36			28
1	92	88	84	80	82	79	75	72	61	59	57	45	44	43	31	30	29			22
2	84	76	70	65	74	68	63	59	53	50	47	39	37	35	27	25	24			18
3	76	67	60	54	68	60	54	49	47	42	39	35	32	29	23	22	20			15
4	69	59	51	45	62	53	46	41	41	37	33	31	27	25	21	19	17			13
5	64	52	44	38	57	47	40	35	37	32	28	27	24	21	19	16	15			11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13			10
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11			8
8	50	38	30	25	44	34	27	23	27	22	19	20	17	14	14	12	10			7
9	46	34	27	22	41	31	25	20	25	20	16	19	15	13	13	11	9			7
10	43	31	24	20	38	28	22	18	23	18	15	17	14	11	12	10	8			6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5611	5611	5611
5°	5627	5465	5475
10°	5590	5358	5342
15°	5538	5236	5192
20°	5460	5105	5047
25°	5373	4961	4890
30°	5279	4818	4730
35°	5172	4672	4587
40°	5086	4532	4440
45°	4959	4400	4310
50°	4850	4251	4173
55°	4738	4106	4014
60°	4565	3927	3865
65°	4375	3733	3686
70°	4143	3512	3479
75°	3818	3266	3281
80°	3455	3016	3075
85°	2969	2765	2907

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 5512 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	0.8
10°-20°	186.8	2.4
20°-30°	282.4	3.6
30°-40°	341.7	4.4
40°-50°	361.2	4.6
50°-60°	340.0	4.4
60°-70°	282.1	3.6
70°-80°	198.0	2.5
80°-90°	115.8	1.5
90°-100°	194.7	2.5
100°-110°	433.2	5.5
110°-120°	685.4	8.8
120°-130°	879.0	11.3
130°-140°	974.4	12.5
140°-150°	951.4	12.2
150°-160°	798.9	10.2
160°-170°	531.5	6.8
170°-180°	186.1	2.4
0°-30°	534.4	6.8
0°-40°	876.2	11.2
0°-60°	1577.4	20.2
0°-90°	2173.3	27.8
90°-120°	1313.3	16.8
90°-150°	4118.2	52.7
90°-180°	5635.0	72.2
0°-180°	7808.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	689	687	681	687	687	65
15°	660	661	659	666	665	186
25°	604	609	611	620	620	278
35°	529	538	546	556	559	331
45°	441	455	470	483	487	341
55°	345	361	384	400	404	308
65°	239	264	290	309	315	237
75°	132	161	193	215	222	141
85°	41	73	108	131	139	43
90°	17	64	110	141	150	15
95°	101	140	183	208	215	107
105°	361	378	413	437	448	384
115°	668	675	696	712	716	659
125°	969	968	986	998	999	864
135°	1247	1257	1262	1271	1271	965
145°	1514	1520	1521	1524	1523	948
155°	1734	1734	1733	1739	1733	798
165°	1888	1883	1880	1889	1883	532
175°	1964	1956	1955	1966	1955	186
180°	1967	1967	1967	1967	1967	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	688.1	688.1	688.1	688.1	688.1
2.5°	691.2	688.9	682.7	688.1	687.3
5°	688.9	686.6	681.2	687.3	686.6
7.5°	684.2	682.7	678.1	685.0	684.2
10°	678.1	677.3	673.5	680.4	679.6
12.5°	669.6	669.6	667.3	673.5	673.5
15°	660.4	661.1	658.8	665.7	665.0
17.5°	648.0	650.3	649.6	656.5	655.7
20°	634.9	637.2	638.0	645.7	645.7
22.5°	620.3	623.4	624.9	632.6	634.2
25°	604.1	608.7	611.0	619.5	620.3
27.5°	586.4	593.3	596.4	604.1	604.9
30°	568.7	574.8	580.2	588.7	590.2
32.5°	549.4	557.1	563.3	573.3	574.8
35°	528.6	537.8	545.5	556.3	558.6
37.5°	507.8	518.6	527.8	538.6	540.9
40°	487.8	497.8	508.6	520.1	523.2
42.5°	464.6	476.2	489.3	502.4	504.7
45°	440.8	455.4	470.0	483.1	487.0
47.5°	418.4	433.0	450.0	463.1	467.7
50°	393.7	410.7	427.7	443.1	447.7
52.5°	369.1	386.0	406.1	421.5	426.1
55°	345.2	361.4	384.5	399.9	404.5
57.5°	318.2	338.3	360.6	379.1	383.0
60°	292.0	312.1	337.5	355.2	361.4
62.5°	266.6	289.0	314.4	332.1	338.3
65°	238.9	263.5	289.7	309.0	315.2
67.5°	212.7	238.9	266.6	285.9	292.0
70°	185.7	211.9	241.2	262.0	267.4
72.5°	159.5	186.5	218.1	238.1	244.3
75°	132.5	161.0	193.4	215.0	221.9
77.5°	107.1	137.2	171.1	192.6	200.3
80°	84.0	114.8	148.7	171.8	178.0
82.5°	60.9	93.2	127.1	151.0	158.0
85°	40.8	73.2	107.9	131.0	138.7
87.5°	25.4	57.0	90.9	113.3	120.2
90°	16.9	64.5	109.8	141.2	150.4
92.5°	51.2	97.8	138.6	164.7	172.4
95°	101.3	140.4	182.6	208.0	215.0
97.5°	155.2	189.8	233.6	259.7	266.7
100°	221.5	247.6	291.4	315.2	320.6
102.5°	291.5	309.9	351.4	375.9	383.6
105°	361.4	378.3	413.0	436.7	447.5
107.5°	435.9	450.5	479.0	504.4	508.3
110°	511.3	525.1	550.5	565.1	575.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	589.6	598.8	621.2	638.1	644.3
115°	667.9	674.9	696.4	711.9	715.8
117.5°	742.4	747.0	768.7	780.2	781.9
120°	816.3	824.7	842.4	850.2	859.4
122.5°	893.9	895.4	914.7	925.5	923.3
125°	969.1	968.3	986.1	997.7	999.2
127.5°	1037.6	1041.3	1053.7	1064.6	1068.4
130°	1109.8	1113.6	1126.0	1136.7	1135.3
132.5°	1184.3	1186.6	1194.4	1204.4	1207.5
135°	1247.4	1256.6	1262.0	1271.3	1271.4
137.5°	1318.9	1322.8	1328.9	1335.9	1341.3
140°	1390.4	1392.8	1393.5	1402.1	1404.3
142.5°	1455.2	1458.2	1455.9	1464.4	1467.5
145°	1514.5	1519.8	1521.3	1524.4	1522.9
147.5°	1575.3	1582.1	1580.6	1579.9	1581.5
150°	1630.1	1635.4	1635.4	1635.4	1633.9
152.5°	1681.0	1684.1	1685.6	1690.2	1685.6
155°	1734.3	1734.3	1732.8	1738.8	1732.8
157.5°	1779.9	1776.9	1776.9	1781.4	1776.9
160°	1819.5	1817.9	1816.4	1821.0	1813.4
162.5°	1856.0	1851.4	1849.9	1859.0	1851.4
165°	1887.9	1883.4	1880.3	1889.4	1883.4
167.5°	1913.8	1907.7	1907.7	1916.8	1907.7
170°	1935.1	1927.5	1929.0	1938.1	1927.5
172.5°	1950.3	1944.2	1944.2	1954.9	1944.2
175°	1964.0	1956.4	1954.9	1965.5	1954.9
177.5°	1970.1	1962.5	1962.5	1973.1	1960.9
180°	1967.0	1967.0	1967.0	1967.0	1967.0

(END OF REPORT)