

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: P1032802

Luminaire Tested: S124DIW-B795D1560UB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032802
REPORT IS A COMBINATION OF REPORTS P998091 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1560UB2750-4F0-XX-W2A-D_3500K
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

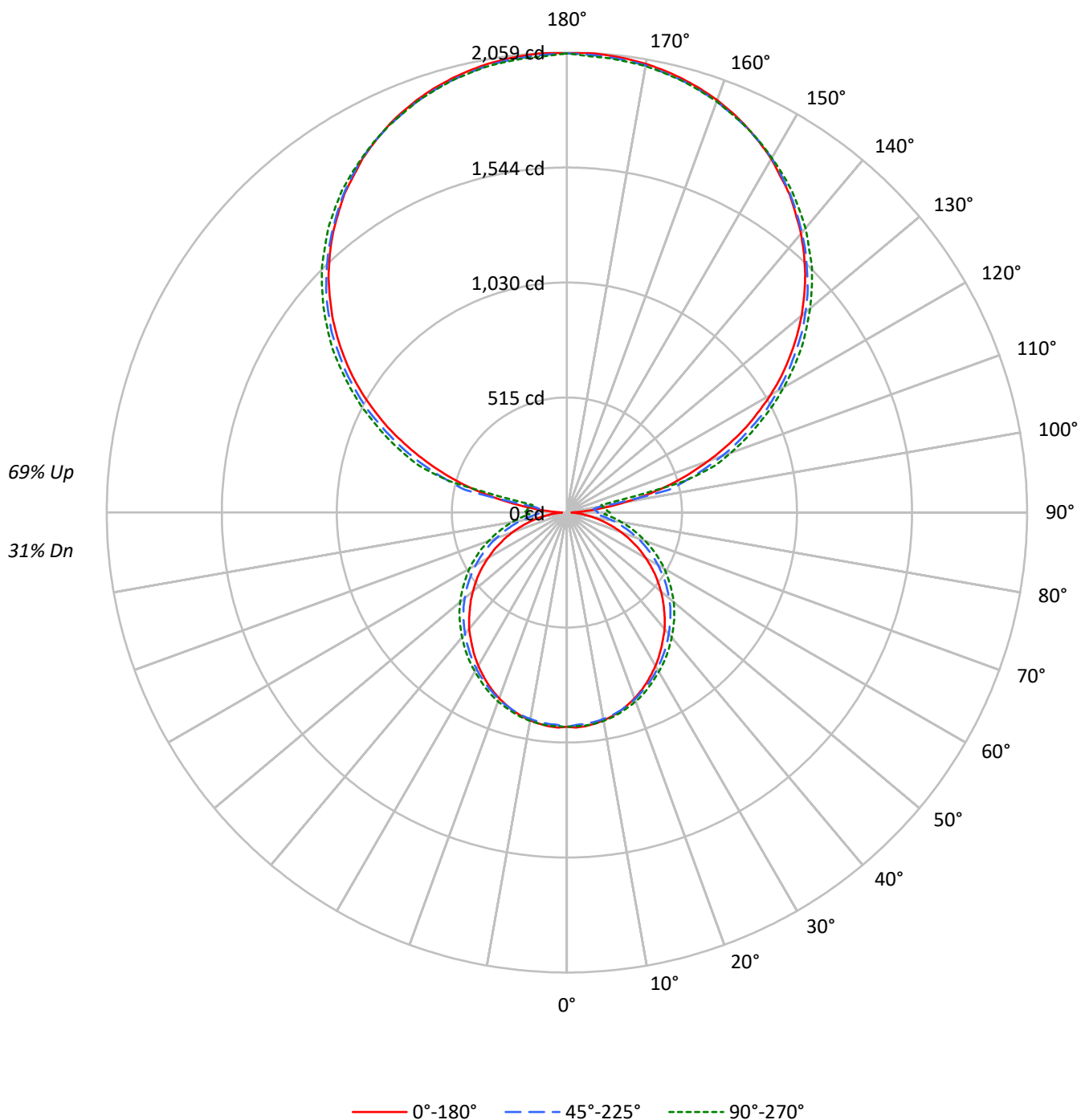
Lumens per Lamp: N/A
Luminaire Lumens: 9632.0 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 88.1
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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	39	39	31
1	93	89	84	81	83	80	76	73	63	61	58	48	46	45	33	33	32	32	32	25
2	84	77	71	65	75	69	64	59	55	51	48	41	39	37	29	28	26	26	26	21
3	77	67	60	54	69	61	54	49	48	44	40	36	33	31	26	24	22	22	22	17
4	70	59	51	45	63	53	47	41	42	38	34	32	29	26	23	20	19	19	19	14
5	64	53	45	39	57	47	40	35	38	33	29	29	25	22	20	18	16	16	16	12
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	18	16	14	14	14	11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	12	12	10
8	50	38	31	25	45	35	28	23	28	23	19	21	18	15	15	13	11	11	11	8
9	47	35	27	22	42	31	25	21	25	20	17	20	16	13	14	12	10	10	10	8
10	44	32	25	20	39	29	23	18	23	18	15	18	14	12	13	11	9	9	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7821	7821	7821
5°	7843	7617	7631
10°	7791	7467	7446
15°	7718	7299	7237
20°	7611	7116	7034
25°	7489	6915	6816
30°	7357	6715	6593
35°	7208	6512	6395
40°	7089	6317	6190
45°	6911	6133	6008
50°	6761	5924	5816
55°	6605	5723	5595
60°	6364	5473	5387
65°	6097	5203	5138
70°	5774	4896	4849
75°	5323	4553	4573
80°	4816	4204	4286
85°	4141	3854	4052

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 7111 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.9	0.9
10°-20°	260.4	2.7
20°-30°	393.7	4.1
30°-40°	476.3	4.9
40°-50°	503.5	5.2
50°-60°	473.9	4.9
60°-70°	393.2	4.1
70°-80°	276.0	2.9
80°-90°	159.8	1.7
90°-100°	160.8	1.7
100°-110°	517.7	5.4
110°-120°	903.7	9.4
120°-130°	1114.7	11.6
130°-140°	1176.0	12.2
140°-150°	1091.4	11.3
150°-160°	878.3	9.1
160°-170°	566.4	5.9
170°-180°	195.2	2.0
0°-30°	744.9	7.7
0°-40°	1221.2	12.7
0°-60°	2198.6	22.8
0°-90°	3027.6	31.4
90°-120°	1582.3	16.4
90°-150°	4964.3	51.5
90°-180°	6604.0	68.6
0°-180°	9632.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	959	959	959	959	959	
5°	960	957	949	958	957	91
15°	920	922	918	928	927	259
25°	842	848	852	864	865	388
35°	737	750	760	776	779	461
45°	614	635	655	673	679	475
55°	481	504	536	557	564	429
65°	333	367	404	431	439	330
75°	185	224	270	300	309	196
85°	57	102	150	183	193	59
90°	22	82	140	180	192	16
95°	98	82	127	165	177	115
105°	472	503	550	591	544	495
115°	870	884	917	944	951	857
125°	1218	1223	1247	1272	1280	1088
135°	1508	1507	1520	1541	1550	1162
145°	1738	1741	1741	1749	1756	1086
155°	1904	1906	1901	1907	1902	878
165°	2008	2001	2001	2013	1999	568
175°	2055	2045	2047	2061	2042	196
180°	2055	2055	2055	2055	2055	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	959.1	959.1	959.1	959.1	959.1
2.5°	963.4	960.2	951.6	959.1	958.0
5°	960.2	957.0	949.4	958.0	957.0
7.5°	953.7	951.6	945.1	954.8	953.7
10°	945.1	944.1	938.7	948.4	947.3
12.5°	933.3	933.3	930.1	938.7	938.7
15°	920.4	921.5	918.3	928.0	926.9
17.5°	903.3	906.5	905.4	915.1	914.0
20°	885.0	888.2	889.3	900.0	900.0
22.5°	864.6	868.9	871.0	881.8	883.9
25°	842.0	848.5	851.7	863.5	864.6
27.5°	817.3	827.0	831.3	842.0	843.1
30°	792.6	801.2	808.7	820.6	822.7
32.5°	765.8	776.5	785.1	799.1	801.2
35°	736.8	749.7	760.4	775.5	778.7
37.5°	707.8	722.8	735.7	750.7	754.0
40°	679.9	693.8	708.9	725.0	729.3
42.5°	647.6	663.8	682.0	700.3	703.5
45°	614.3	634.8	655.2	673.4	678.8
47.5°	583.2	603.6	627.2	645.5	651.9
50°	548.8	572.5	596.1	617.6	624.0
52.5°	514.5	538.1	566.0	587.5	593.9
55°	481.2	503.7	535.9	557.4	563.9
57.5°	443.6	471.5	502.6	528.4	533.8
60°	407.1	435.0	470.4	495.1	503.7
62.5°	371.6	402.8	438.2	462.9	471.5
65°	332.9	367.3	403.8	430.7	439.3
67.5°	296.4	332.9	371.6	398.5	407.1
70°	258.8	295.4	336.2	365.2	372.7
72.5°	222.3	259.9	304.0	331.9	340.5
75°	184.7	224.5	269.6	299.7	309.3
77.5°	149.3	191.2	238.4	268.5	279.2
80°	117.1	160.0	207.3	239.5	248.1
82.5°	84.8	130.0	177.2	210.5	220.2
85°	56.9	102.0	150.4	182.6	193.3
87.5°	35.4	79.5	126.7	157.9	167.5
90°	21.8	81.6	140.1	180.5	192.2
92.5°	39.2	73.7	132.2	171.5	180.1
95°	98.5	81.7	127.2	165.4	176.7
97.5°	174.3	239.2	121.9	157.5	168.7
100°	263.8	319.4	149.2	152.1	161.1
102.5°	365.3	407.3	466.6	148.8	157.4
105°	472.3	502.9	550.4	591.0	544.3
107.5°	572.1	595.0	643.3	677.9	691.5
110°	672.5	692.1	738.9	766.7	779.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	769.7	791.8	830.3	852.5	867.2
115°	870.1	884.4	917.2	943.9	951.4
117.5°	960.7	973.4	1010.2	1031.2	1039.8
120°	1051.9	1061.3	1090.8	1115.4	1120.9
122.5°	1138.0	1141.1	1173.1	1196.1	1200.6
125°	1218.3	1223.4	1247.2	1272.2	1280.2
127.5°	1296.7	1297.1	1326.3	1344.1	1350.2
130°	1370.9	1371.3	1393.2	1414.1	1420.5
132.5°	1440.1	1442.0	1461.1	1480.9	1485.8
135°	1508.1	1506.6	1520.3	1540.6	1550.1
137.5°	1569.6	1568.6	1580.6	1599.7	1603.6
140°	1629.5	1631.6	1635.7	1654.3	1661.2
142.5°	1682.3	1688.4	1688.9	1703.8	1708.1
145°	1737.6	1741.1	1741.1	1749.1	1756.4
147.5°	1780.7	1788.8	1787.2	1789.9	1795.7
150°	1828.3	1833.3	1831.8	1831.8	1833.3
152.5°	1867.1	1871.8	1868.7	1871.8	1870.2
155°	1904.0	1905.6	1901.0	1907.1	1902.5
157.5°	1936.3	1936.3	1930.2	1937.8	1930.2
160°	1964.0	1959.4	1957.8	1967.0	1957.8
162.5°	1988.6	1982.4	1980.9	1990.1	1979.3
165°	2008.5	2000.8	2000.8	2013.1	1999.3
167.5°	2025.4	2017.8	2016.2	2030.0	2014.7
170°	2039.3	2030.0	2031.6	2043.9	2028.5
172.5°	2048.5	2039.3	2040.8	2053.1	2036.2
175°	2054.6	2045.4	2046.9	2060.8	2042.3
177.5°	2059.2	2048.5	2051.6	2063.9	2045.4
180°	2054.6	2054.6	2054.6	2054.6	2054.6

(END OF REPORT)