

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: P1033739

Luminaire Tested: S124DIW-B795D1560UB27-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033739
REPORT IS A COMBINATION OF REPORTS P998074 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1560UB27-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

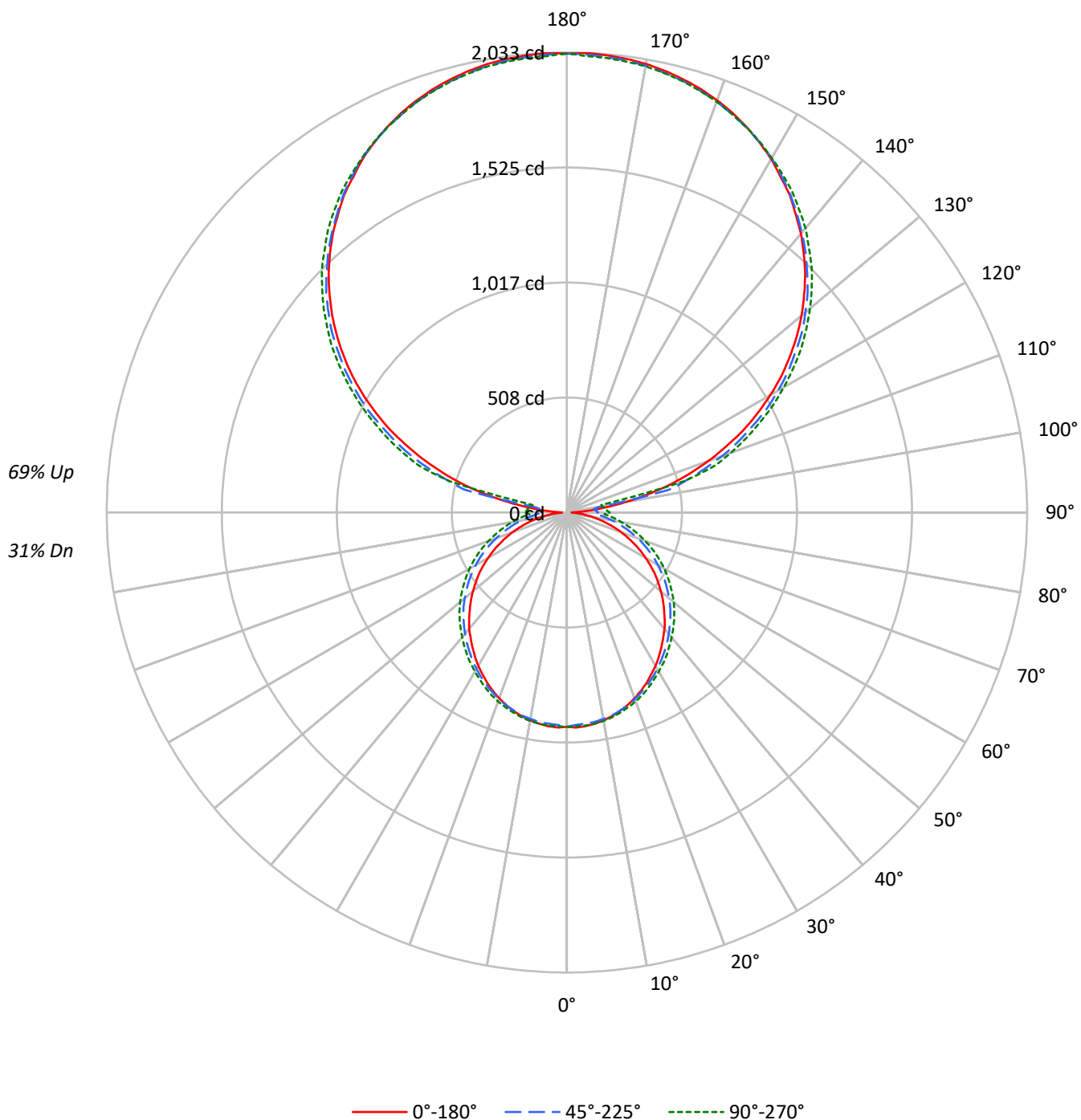
Lumens per Lamp: N/A
Luminaire Lumens: 9508.0 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7721	7721	7721
5°	7742	7519	7533
10°	7692	7371	7350
15°	7619	7205	7144
20°	7513	7025	6944
25°	7393	6827	6729
30°	7263	6630	6508
35°	7116	6428	6313
40°	6997	6236	6110
45°	6824	6054	5931
50°	6674	5848	5741
55°	6520	5650	5523
60°	6281	5403	5319
65°	6020	5136	5071
70°	5700	4833	4786
75°	5256	4494	4514
80°	4754	4149	4230
85°	4090	3803	3999

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 7045 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	0.9
10°-20°	257.0	2.7
20°-30°	388.6	4.1
30°-40°	470.2	4.9
40°-50°	497.1	5.2
50°-60°	467.8	4.9
60°-70°	388.2	4.1
70°-80°	272.4	2.9
80°-90°	157.8	1.7
90°-100°	158.8	1.7
100°-110°	511.1	5.4
110°-120°	892.1	9.4
120°-130°	1100.4	11.6
130°-140°	1160.8	12.2
140°-150°	1077.3	11.3
150°-160°	867.0	9.1
160°-170°	559.1	5.9
170°-180°	192.7	2.0
0°-30°	735.4	7.7
0°-40°	1205.6	12.7
0°-60°	2170.4	22.8
0°-90°	2988.8	31.4
90°-120°	1561.9	16.4
90°-150°	4900.4	51.5
90°-180°	6519.0	68.6
0°-180°	9508.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	948	945	937	946	945	90
15°	909	910	906	916	915	256
25°	831	838	841	852	854	383
35°	727	740	751	766	769	455
45°	606	627	647	665	670	469
55°	475	497	529	550	557	423
65°	329	363	399	425	434	326
75°	182	222	266	296	305	194
85°	56	101	148	180	191	59
90°	22	81	138	178	190	16
95°	97	81	126	163	174	114
105°	466	496	543	583	537	489
115°	859	873	905	932	939	846
125°	1203	1208	1231	1256	1264	1074
135°	1489	1487	1501	1521	1530	1147
145°	1715	1719	1719	1727	1734	1072
155°	1880	1881	1876	1882	1878	867
165°	1983	1975	1975	1987	1974	560
175°	2028	2019	2021	2034	2016	193
180°	2028	2028	2028	2028	2028	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	946.8	946.8	946.8	946.8	946.8
2.5°	951.0	947.9	939.4	946.8	945.7
5°	947.9	944.7	937.2	945.7	944.7
7.5°	941.5	939.4	933.0	942.6	941.5
10°	933.0	931.9	926.6	936.2	935.1
12.5°	921.3	921.3	918.2	926.6	926.6
15°	908.6	909.7	906.5	916.0	915.0
17.5°	891.7	894.8	893.8	903.3	902.3
20°	873.6	876.8	877.9	888.5	888.5
22.5°	853.5	857.7	859.9	870.5	872.6
25°	831.2	837.6	840.8	852.4	853.5
27.5°	806.8	816.4	820.6	831.2	832.3
30°	782.5	790.9	798.4	810.0	812.1
32.5°	755.9	766.6	775.0	788.8	790.9
35°	727.3	740.0	750.6	765.5	768.7
37.5°	698.7	713.5	726.3	741.1	744.3
40°	671.1	684.9	699.8	715.7	719.9
42.5°	639.3	655.2	673.3	691.3	694.5
45°	606.5	626.6	646.7	664.8	670.1
47.5°	575.7	595.9	619.2	637.2	643.6
50°	541.8	565.1	588.4	609.6	616.0
52.5°	507.9	531.2	558.7	579.9	586.3
55°	475.0	497.3	529.1	550.3	556.6
57.5°	437.9	465.4	496.2	521.6	526.9
60°	401.8	429.4	464.4	488.8	497.3
62.5°	366.8	397.6	432.6	457.0	465.4
65°	328.7	362.6	398.6	425.2	433.6
67.5°	292.6	328.7	366.8	393.3	401.8
70°	255.5	291.6	331.9	360.5	367.9
72.5°	219.5	256.6	300.0	327.6	336.1
75°	182.4	221.6	266.1	295.8	305.3
77.5°	147.4	188.7	235.4	265.1	275.7
80°	115.6	158.0	204.6	236.4	244.9
82.5°	83.8	128.3	174.9	207.8	217.3
85°	56.2	100.7	148.4	180.2	190.8
87.5°	35.0	78.5	125.1	155.9	165.4
90°	21.6	80.6	138.4	178.2	189.7
92.5°	38.7	72.7	130.5	169.3	177.8
95°	97.2	80.7	125.6	163.4	174.4
97.5°	172.0	236.2	120.3	155.5	166.5
100°	260.5	315.3	147.3	150.2	159.1
102.5°	360.6	402.1	460.6	146.8	155.3
105°	466.1	496.4	543.3	583.4	537.3
107.5°	564.7	587.4	635.1	669.2	682.6
110°	663.8	683.2	729.4	756.8	769.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	759.8	781.6	819.6	841.5	856.0
115°	858.9	873.0	905.4	931.8	939.2
117.5°	948.4	960.8	997.1	1017.9	1026.4
120°	1038.3	1047.6	1076.8	1101.0	1106.5
122.5°	1123.3	1126.3	1158.0	1180.7	1185.1
125°	1202.6	1207.7	1231.1	1255.8	1263.7
127.5°	1279.9	1280.5	1309.2	1326.8	1332.7
130°	1353.3	1353.7	1375.2	1395.9	1402.2
132.5°	1421.5	1423.5	1442.2	1461.9	1466.6
135°	1488.7	1487.2	1500.7	1520.7	1530.1
137.5°	1549.4	1548.4	1560.2	1579.1	1582.9
140°	1608.5	1610.6	1614.6	1633.0	1639.8
142.5°	1660.6	1666.7	1667.1	1681.9	1686.1
145°	1715.2	1718.7	1718.7	1726.6	1733.8
147.5°	1757.7	1765.7	1764.2	1766.8	1772.5
150°	1804.7	1809.7	1808.2	1808.2	1809.7
152.5°	1843.1	1847.6	1844.6	1847.6	1846.1
155°	1879.5	1881.0	1876.5	1882.5	1878.0
157.5°	1911.3	1911.3	1905.3	1912.9	1905.3
160°	1938.7	1934.1	1932.6	1941.7	1932.6
162.5°	1962.9	1956.9	1955.3	1964.4	1953.8
165°	1982.6	1975.1	1975.1	1987.2	1973.5
167.5°	1999.3	1991.7	1990.2	2003.9	1988.7
170°	2013.0	2003.9	2005.4	2017.5	2002.4
172.5°	2022.1	2013.0	2014.5	2026.6	2009.9
175°	2028.2	2019.0	2020.6	2034.2	2016.0
177.5°	2032.7	2022.1	2025.1	2037.3	2019.0
180°	2028.2	2028.2	2028.2	2028.2	2028.2

(END OF REPORT)