

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: P1033740

Luminaire Tested: S124DIW-B795D1560UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033740
REPORT IS A COMBINATION OF REPORTS P998075 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-D1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

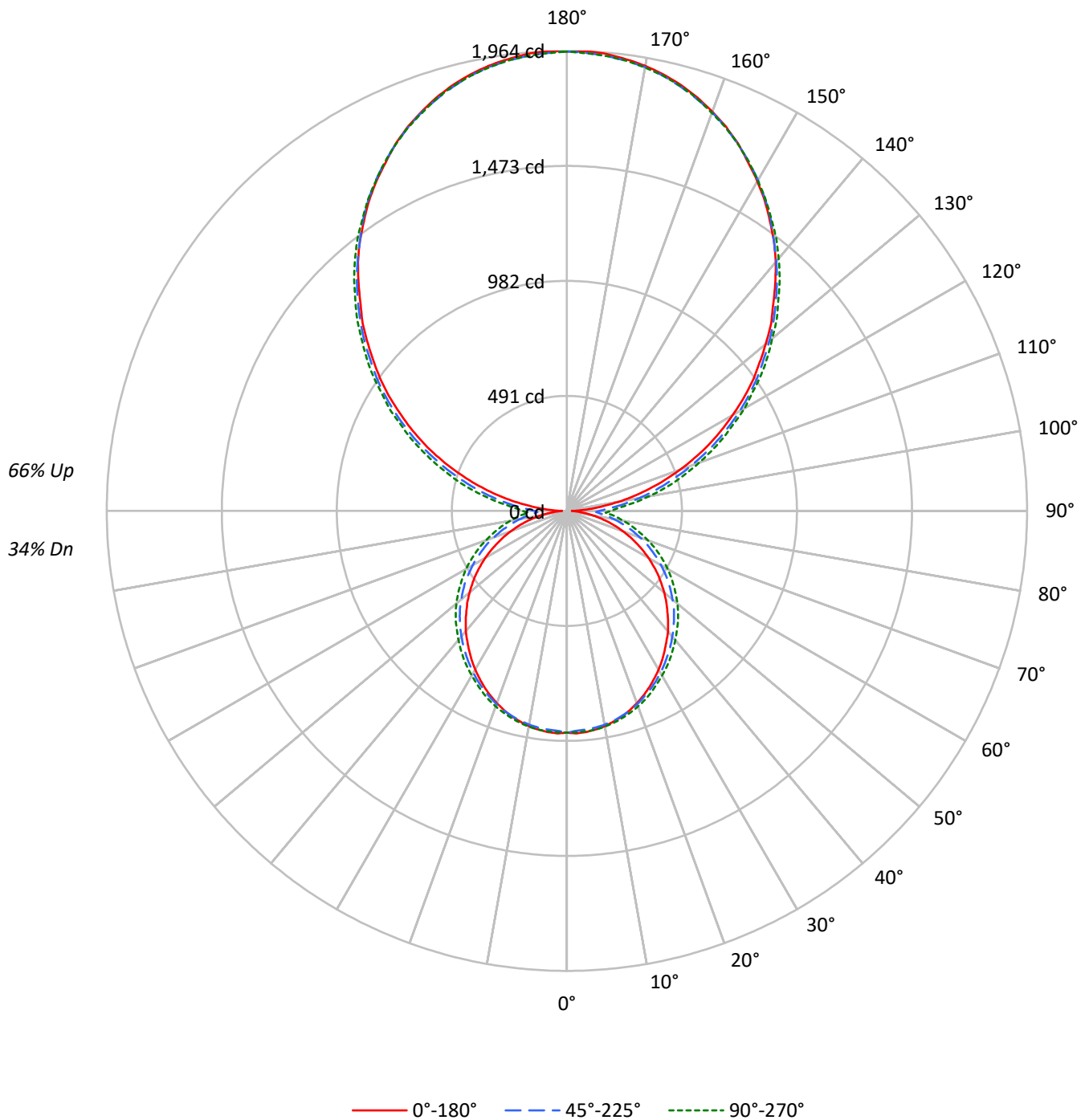
Lumens per Lamp: N/A
Luminaire Lumens: 8674.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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	93	93	93	93	75	75	75	58	58	58	42	42	42
1	94	89	85	81	84	80	77	74	64	62	60	50	48	46	36	35	34
2	85	77	71	66	76	70	65	60	56	52	49	43	40	38	31	29	28
3	77	68	60	54	69	61	55	50	49	44	41	38	35	32	27	25	23
4	70	60	52	46	63	54	47	42	43	38	34	33	30	27	24	22	20
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15
7	55	43	35	29	49	39	32	27	31	26	22	24	21	18	18	15	13
8	51	38	31	26	46	35	28	24	28	23	20	22	18	16	16	14	12
9	47	35	28	23	42	32	25	21	26	21	17	20	17	14	15	12	11
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	11	10

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	1.0
10°-20°	257.0	3.0
20°-30°	388.6	4.5
30°-40°	470.2	5.4
40°-50°	497.1	5.7
50°-60°	467.8	5.4
60°-70°	388.2	4.5
70°-80°	272.4	3.1
80°-90°	157.8	1.8
90°-100°	219.3	2.5
100°-110°	450.6	5.2
110°-120°	695.9	8.0
120°-130°	883.5	10.2
130°-140°	974.6	11.2
140°-150°	949.2	10.9
150°-160°	796.5	9.2
160°-170°	530.0	6.1
170°-180°	185.6	2.1
0°-30°	735.4	8.5
0°-40°	1205.6	13.9
0°-60°	2170.4	25.0
0°-90°	2988.8	34.5
90°-120°	1365.8	15.7
90°-150°	4173.1	48.1
90°-180°	5685.0	65.5
0°-180°	8674.0	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	18
95°	105	154	208	241	250	110
105°	363	386	431	462	475	386
115°	668	677	708	730	736	659
125°	967	966	991	1008	1012	863
135°	1244	1254	1261	1275	1277	963
145°	1510	1515	1517	1522	1521	945
155°	1729	1729	1728	1734	1728	796
165°	1882	1878	1875	1884	1878	531
175°	1958	1951	1949	1960	1949	186
180°	1961	1961	1961	1961	1961	

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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°	55.3	112.2	165.3	199.6	209.6
95°	104.8	153.5	207.5	240.7	250.2
97.5°	158.3	201.3	256.8	290.5	300.0
100°	224.1	257.6	312.7	344.3	351.7
102.5°	293.8	318.6	371.1	403.1	413.2
105°	362.9	385.6	431.0	462.1	475.1
107.5°	437.2	456.9	495.5	528.0	533.9
110°	512.1	529.9	565.5	586.9	599.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	589.9	602.6	634.5	657.9	666.3
115°	667.7	677.2	708.1	730.0	735.9
117.5°	742.1	748.4	778.6	796.4	800.3
120°	815.3	824.6	850.7	864.3	875.9
122.5°	892.7	894.2	921.3	937.9	937.8
125°	967.4	966.4	991.4	1008.4	1011.8
127.5°	1035.6	1039.2	1057.4	1073.4	1079.3
130°	1107.5	1110.9	1127.9	1144.0	1144.2
132.5°	1181.8	1183.7	1194.9	1210.0	1214.7
135°	1244.4	1253.5	1260.9	1274.9	1276.7
137.5°	1315.7	1319.2	1326.5	1337.8	1344.6
140°	1387.0	1389.0	1390.0	1402.3	1406.1
142.5°	1451.2	1454.2	1451.6	1463.3	1467.5
145°	1510.4	1515.3	1516.8	1521.7	1521.4
147.5°	1571.0	1577.5	1576.0	1575.6	1578.3
150°	1625.6	1630.6	1630.6	1630.6	1629.1
152.5°	1676.1	1679.1	1680.7	1685.2	1680.7
155°	1729.2	1729.2	1727.7	1733.7	1727.7
157.5°	1774.7	1771.7	1771.7	1776.2	1771.7
160°	1814.1	1812.6	1811.1	1815.7	1808.1
162.5°	1850.5	1846.0	1844.5	1853.6	1846.0
165°	1882.4	1877.8	1874.8	1883.9	1877.8
167.5°	1908.2	1902.1	1902.1	1911.2	1902.1
170°	1929.4	1921.8	1923.4	1932.5	1921.8
172.5°	1944.6	1938.5	1938.5	1949.1	1938.5
175°	1958.2	1950.7	1949.1	1959.8	1949.1
177.5°	1964.3	1956.7	1956.7	1967.3	1955.2
180°	1961.3	1961.3	1961.3	1961.3	1961.3

(END OF REPORT)