

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: P1033756

Luminaire Tested: S124DIW-B795D1560UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033756
REPORT IS A COMBINATION OF REPORTS P998123 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1560UB40-4F0-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

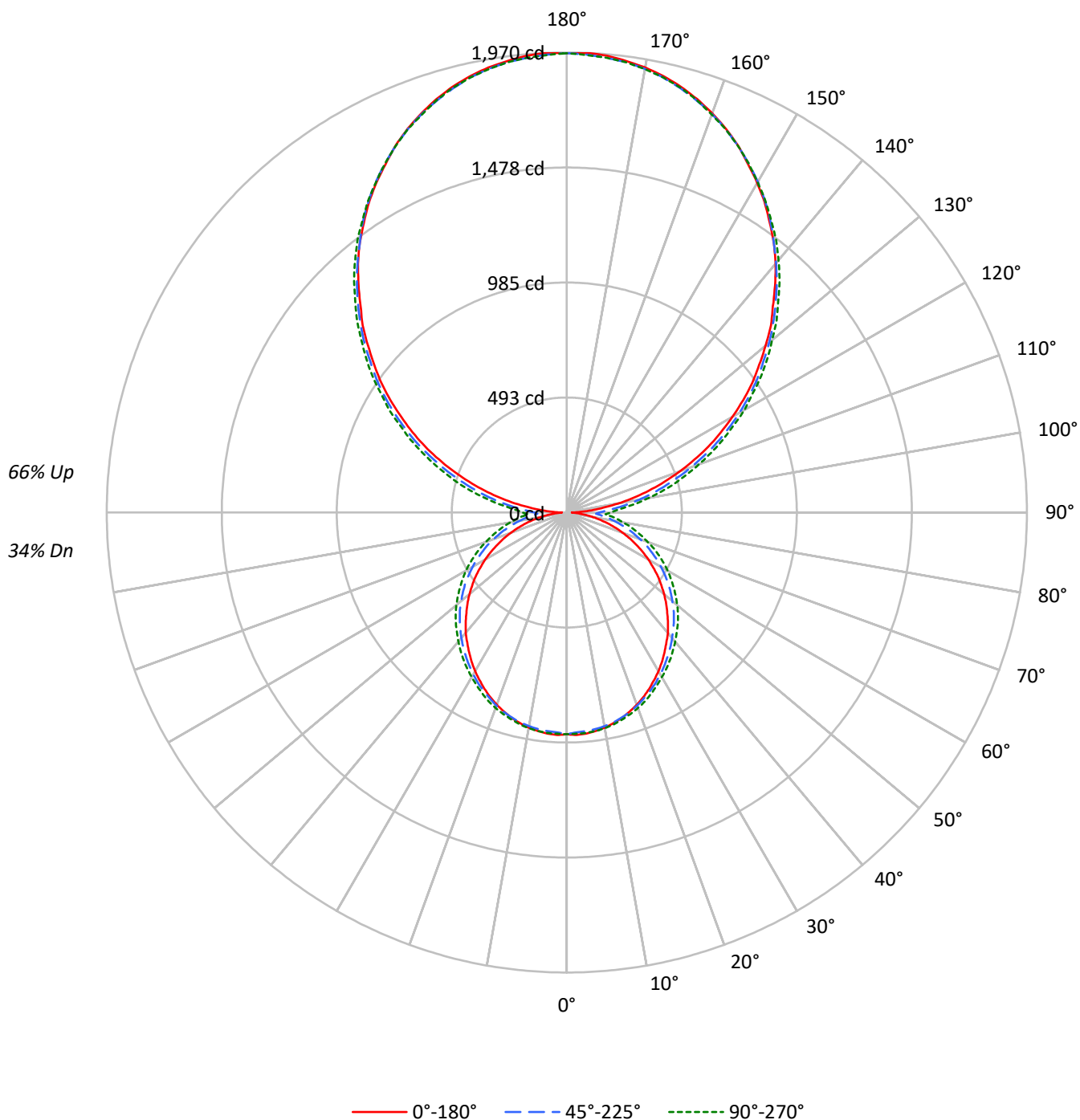
Lumens per Lamp: N/A
Luminaire Lumens: 8699.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	49	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°	7742	7742	7742
5°	7763	7541	7554
10°	7713	7392	7371
15°	7641	7225	7164
20°	7534	7044	6964
25°	7413	6845	6747
30°	7283	6648	6527
35°	7136	6446	6330
40°	7017	6253	6127
45°	6842	6071	5947
50°	6693	5865	5757
55°	6538	5665	5539
60°	6300	5418	5333
65°	6036	5152	5085
70°	5716	4846	4799
75°	5271	4507	4527
80°	4767	4162	4242
85°	4097	3813	4012

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°	90.0	1.0
10°-20°	257.7	3.0
20°-30°	389.7	4.5
30°-40°	471.5	5.4
40°-50°	498.4	5.7
50°-60°	469.1	5.4
60°-70°	389.3	4.5
70°-80°	273.2	3.1
80°-90°	158.2	1.8
90°-100°	219.9	2.5
100°-110°	451.9	5.2
110°-120°	698.0	8.0
120°-130°	886.1	10.2
130°-140°	977.5	11.2
140°-150°	952.0	10.9
150°-160°	798.9	9.2
160°-170°	531.5	6.1
170°-180°	186.1	2.1
0°-30°	737.4	8.5
0°-40°	1208.9	13.9
0°-60°	2176.5	25.0
0°-90°	2997.1	34.5
90°-120°	1369.8	15.7
90°-150°	4185.4	48.1
90°-180°	5702.0	65.5
0°-180°	8699.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	949	949	949	949	949	
5°	950	947	940	948	947	90
15°	911	912	909	919	918	257
25°	834	840	843	855	856	384
35°	729	742	753	768	771	457
45°	608	628	648	667	672	470
55°	476	499	530	552	558	424
65°	330	364	400	426	435	327
75°	183	222	267	297	306	194
85°	56	101	149	181	191	59
90°	22	81	139	179	190	18
95°	105	154	208	241	251	110
105°	364	387	432	463	476	387
115°	670	679	710	732	738	661
125°	970	969	994	1012	1015	865
135°	1248	1257	1265	1279	1280	966
145°	1515	1520	1521	1526	1526	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°	949.4	949.4	949.4	949.4	949.4
2.5°	953.7	950.5	942.0	949.4	948.4
5°	950.5	947.3	939.9	948.4	947.3
7.5°	944.1	942.0	935.6	945.2	944.1
10°	935.6	934.5	929.2	938.8	937.7
12.5°	923.9	923.9	920.7	929.2	929.2
15°	911.2	912.2	909.0	918.6	917.5
17.5°	894.1	897.3	896.3	905.8	904.8
20°	876.1	879.3	880.3	891.0	891.0
22.5°	855.9	860.1	862.2	872.9	875.0
25°	833.5	839.9	843.1	854.8	855.9
27.5°	809.1	818.7	822.9	833.5	834.6
30°	784.6	793.1	800.6	812.3	814.4
32.5°	758.1	768.7	777.2	791.0	793.1
35°	729.4	742.1	752.7	767.6	770.8
37.5°	700.6	715.5	728.3	743.2	746.4
40°	673.0	686.8	701.7	717.7	721.9
42.5°	641.1	657.1	675.1	693.2	696.4
45°	608.1	628.3	648.5	666.6	671.9
47.5°	577.3	597.5	620.9	639.0	645.4
50°	543.3	566.7	590.1	611.3	617.7
52.5°	509.3	532.7	560.3	581.6	587.9
55°	476.3	498.6	530.5	551.8	558.2
57.5°	439.1	466.7	497.6	523.1	528.4
60°	403.0	430.6	465.7	490.1	498.6
62.5°	367.9	398.7	433.8	458.2	466.7
65°	329.6	363.6	399.8	426.3	434.8
67.5°	293.4	329.6	367.9	394.4	403.0
70°	256.2	292.4	332.8	361.5	368.9
72.5°	220.1	257.3	300.9	328.5	337.0
75°	182.9	222.2	266.9	296.6	306.2
77.5°	147.8	189.2	236.0	265.8	276.4
80°	115.9	158.4	205.2	237.1	245.6
82.5°	84.0	128.6	175.4	208.4	218.0
85°	56.3	101.0	148.8	180.7	191.4
87.5°	35.1	78.7	125.5	156.3	165.9
90°	21.6	80.8	138.8	178.7	190.2
92.5°	55.5	112.5	165.8	200.1	210.2
95°	105.1	153.9	208.1	241.4	251.0
97.5°	158.8	201.8	257.6	291.3	300.9
100°	224.7	258.4	313.6	345.3	352.8
102.5°	294.7	319.6	372.2	404.3	414.3
105°	364.1	386.8	432.3	463.4	476.5
107.5°	438.6	458.1	496.9	529.5	535.5
110°	513.6	531.5	567.2	588.6	601.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	591.6	604.4	636.4	659.8	668.3
115°	669.7	679.2	710.2	732.1	738.0
117.5°	744.2	750.6	781.0	798.7	802.7
120°	817.7	827.0	853.2	866.9	878.4
122.5°	895.3	896.8	924.0	940.7	940.5
125°	970.3	969.2	994.3	1011.5	1014.7
127.5°	1038.8	1042.2	1060.5	1076.6	1082.4
130°	1110.7	1114.2	1131.2	1147.3	1147.6
132.5°	1185.2	1187.2	1198.5	1213.5	1218.3
135°	1248.0	1257.2	1264.7	1278.6	1280.5
137.5°	1319.5	1323.1	1330.3	1341.8	1348.6
140°	1391.0	1393.1	1394.1	1406.4	1410.2
142.5°	1455.5	1458.5	1455.9	1467.6	1471.8
145°	1514.8	1519.8	1521.3	1526.2	1525.8
147.5°	1575.6	1582.1	1580.6	1580.2	1582.9
150°	1630.4	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)