

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: P1033752

Luminaire Tested: S124DIW-B795D1560UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033752
REPORT IS A COMBINATION OF REPORTS P998114 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1560UB35-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

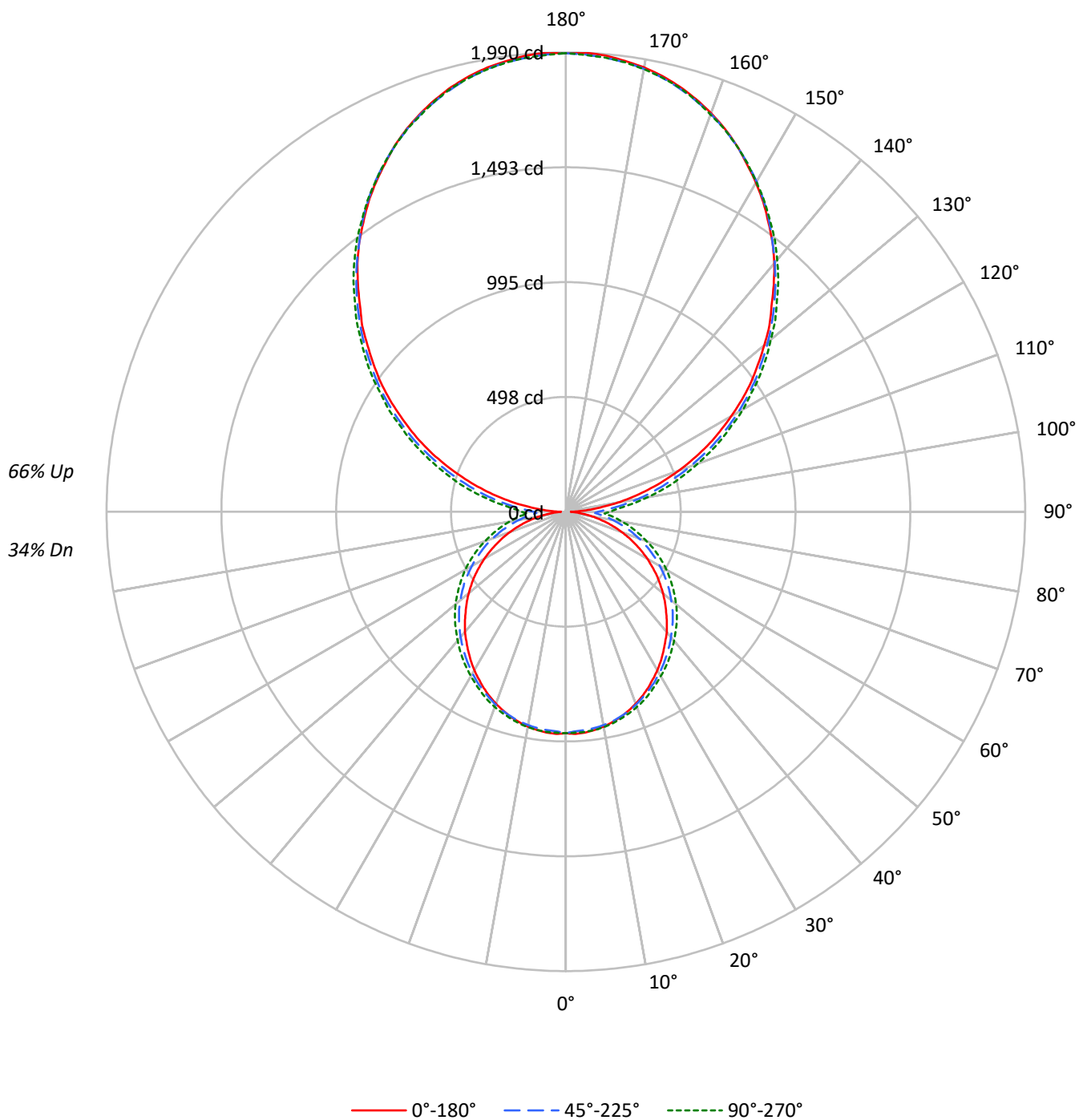
Lumens per Lamp: N/A
Luminaire Lumens: 8787.0 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	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°	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	1.0
10°-20°	260.4	3.0
20°-30°	393.7	4.5
30°-40°	476.3	5.4
40°-50°	503.5	5.7
50°-60°	473.9	5.4
60°-70°	393.2	4.5
70°-80°	276.0	3.1
80°-90°	159.8	1.8
90°-100°	222.1	2.5
100°-110°	456.5	5.2
110°-120°	705.0	8.0
120°-130°	895.0	10.2
130°-140°	987.3	11.2
140°-150°	961.6	10.9
150°-160°	806.9	9.2
160°-170°	536.9	6.1
170°-180°	188.0	2.1
0°-30°	744.9	8.5
0°-40°	1221.2	13.9
0°-60°	2198.6	25.0
0°-90°	3027.6	34.5
90°-120°	1383.6	15.7
90°-150°	4227.5	48.1
90°-180°	5759.0	65.5
0°-180°	8787.0	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	19
95°	106	155	210	244	254	111
105°	368	391	437	468	481	391
115°	676	686	717	740	745	668
125°	980	979	1004	1022	1025	874
135°	1261	1270	1277	1292	1293	976
145°	1530	1535	1537	1542	1541	958
155°	1752	1752	1750	1756	1750	806
165°	1907	1902	1899	1908	1902	538
175°	1984	1976	1974	1985	1974	188
180°	1987	1987	1987	1987	1987	

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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°	56.1	113.6	167.5	202.2	212.4
95°	106.2	155.4	210.2	243.8	253.5
97.5°	160.4	203.8	260.2	294.2	303.9
100°	226.9	261.0	316.7	348.8	356.3
102.5°	297.6	322.7	375.9	408.4	418.6
105°	367.7	390.7	436.6	468.0	481.2
107.5°	443.0	462.8	501.9	534.9	540.9
110°	518.8	536.8	572.9	594.5	607.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	597.6	610.5	642.8	666.5	675.1
115°	676.4	686.1	717.4	739.5	745.4
117.5°	751.7	758.2	788.8	806.8	810.8
120°	826.0	835.3	861.8	875.6	887.3
122.5°	904.3	905.9	933.3	950.1	950.0
125°	980.0	978.9	1004.3	1021.6	1025.0
127.5°	1049.2	1052.7	1071.1	1087.4	1093.4
130°	1121.9	1125.4	1142.6	1158.9	1159.1
132.5°	1197.1	1199.1	1210.5	1225.7	1230.6
135°	1260.6	1269.8	1277.4	1291.5	1293.3
137.5°	1332.8	1336.4	1343.8	1355.3	1362.2
140°	1405.0	1407.1	1408.1	1420.6	1424.4
142.5°	1470.1	1473.2	1470.5	1482.3	1486.6
145°	1530.0	1535.1	1536.6	1541.5	1541.2
147.5°	1591.5	1598.1	1596.5	1596.1	1598.9
150°	1646.8	1651.9	1651.9	1651.9	1650.3
152.5°	1698.0	1701.0	1702.6	1707.2	1702.6
155°	1751.7	1751.7	1750.2	1756.3	1750.2
157.5°	1797.8	1794.8	1794.8	1799.4	1794.8
160°	1837.8	1836.3	1834.7	1839.3	1831.6
162.5°	1874.7	1870.1	1868.5	1877.7	1870.1
165°	1906.9	1902.3	1899.3	1908.5	1902.3
167.5°	1933.1	1926.9	1926.9	1936.1	1926.9
170°	1954.6	1946.9	1948.4	1957.6	1946.9
172.5°	1969.9	1963.8	1963.8	1974.5	1963.8
175°	1983.8	1976.1	1974.5	1985.3	1974.5
177.5°	1989.9	1982.2	1982.2	1993.0	1980.7
180°	1986.8	1986.8	1986.8	1986.8	1986.8

(END OF REPORT)