

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: P1033760

Luminaire Tested: S124DIW-B795D1560UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033760
REPORT IS A COMBINATION OF REPORTS P998131 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1560UB50-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

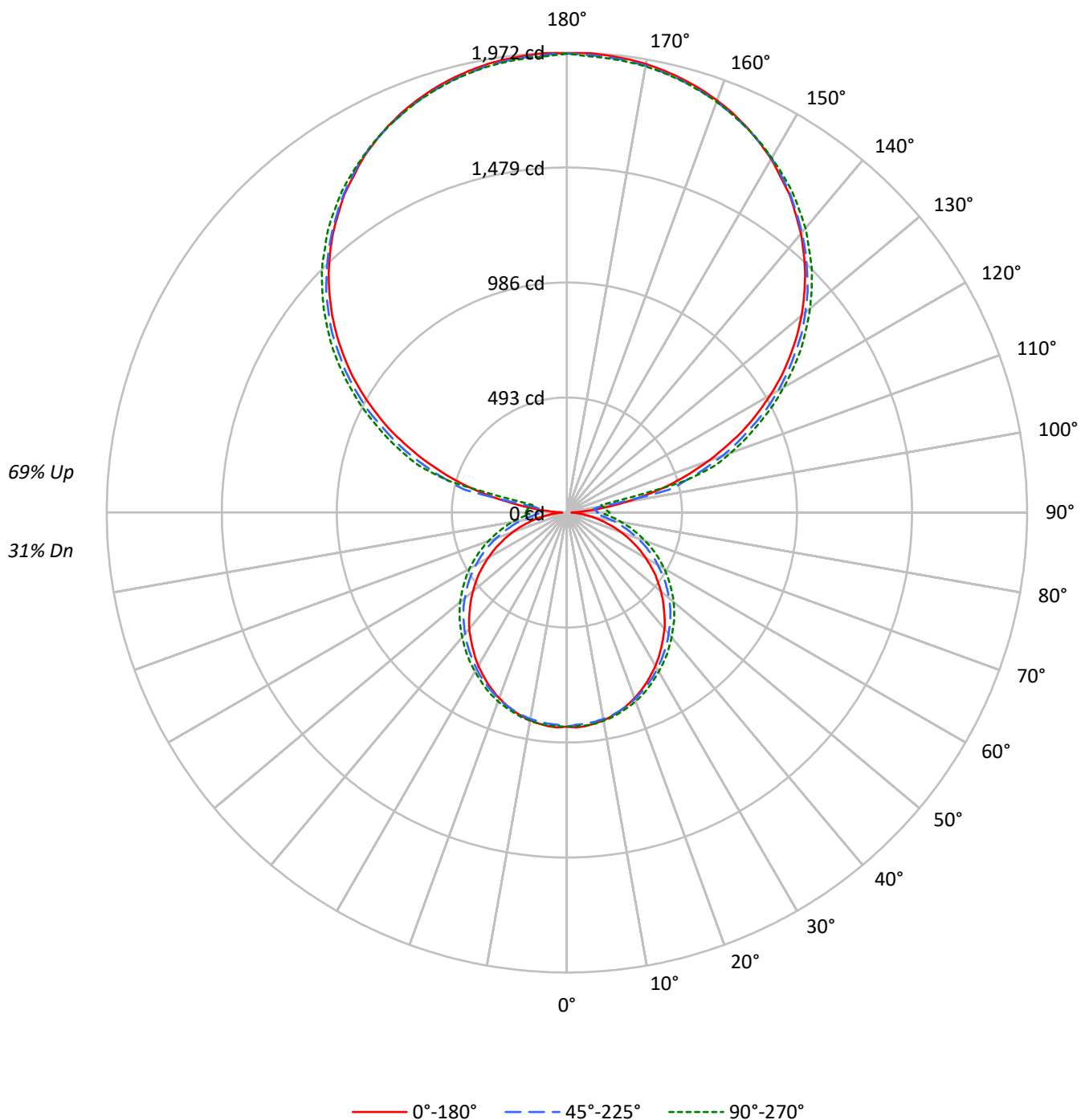
Lumens per Lamp: N/A
Luminaire Lumens: 9221.0 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	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°	7486	7486	7486
5°	7507	7291	7304
10°	7458	7147	7127
15°	7388	6986	6927
20°	7285	6812	6733
25°	7168	6619	6524
30°	7042	6428	6311
35°	6899	6234	6121
40°	6785	6046	5924
45°	6616	5870	5750
50°	6471	5671	5567
55°	6323	5478	5355
60°	6090	5239	5157
65°	5836	4980	4918
70°	5528	4686	4641
75°	5095	4357	4378
80°	4611	4024	4103
85°	3966	3687	3878

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 6785 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.0	0.9
10°-20°	249.2	2.7
20°-30°	376.8	4.1
30°-40°	455.9	4.9
40°-50°	482.0	5.2
50°-60°	453.6	4.9
60°-70°	376.4	4.1
70°-80°	264.1	2.9
80°-90°	153.0	1.7
90°-100°	153.9	1.7
100°-110°	495.7	5.4
110°-120°	865.2	9.4
120°-130°	1067.2	11.6
130°-140°	1125.9	12.2
140°-150°	1044.9	11.3
150°-160°	840.9	9.1
160°-170°	542.3	5.9
170°-180°	186.9	2.0
0°-30°	713.1	7.7
0°-40°	1169.0	12.7
0°-60°	2104.5	22.8
0°-90°	2898.0	31.4
90°-120°	1514.8	16.4
90°-150°	4752.8	51.5
90°-180°	6323.0	68.6
0°-180°	9221.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	919	916	909	917	916	87
15°	881	882	879	888	887	248
25°	806	812	815	827	828	371
35°	705	718	728	742	745	442
45°	588	608	627	645	650	454
55°	461	482	513	534	540	410
65°	319	352	386	412	420	316
75°	177	215	258	287	296	188
85°	54	98	144	175	185	57
90°	21	78	134	173	184	15
95°	94	78	122	158	169	110
105°	452	482	527	566	521	474
115°	833	847	878	904	911	820
125°	1166	1171	1194	1218	1226	1042
135°	1444	1442	1456	1475	1484	1113
145°	1664	1667	1667	1675	1682	1040
155°	1823	1824	1820	1826	1822	841
165°	1923	1916	1916	1927	1914	543
175°	1967	1958	1960	1973	1955	187
180°	1967	1967	1967	1967	1967	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	918.0	918.0	918.0	918.0	918.0
2.5°	922.2	919.1	910.9	918.0	917.0
5°	919.1	916.0	908.8	917.0	916.0
7.5°	912.9	910.9	904.7	913.9	912.9
10°	904.7	903.7	898.5	907.8	906.7
12.5°	893.4	893.4	890.3	898.5	898.5
15°	881.0	882.1	879.0	888.2	887.2
17.5°	864.6	867.7	866.6	875.9	874.9
20°	847.1	850.2	851.2	861.5	861.5
22.5°	827.6	831.7	833.7	844.0	846.1
25°	806.0	812.2	815.2	826.6	827.6
27.5°	782.3	791.6	795.7	806.0	807.0
30°	758.7	766.9	774.1	785.4	787.5
32.5°	733.0	743.3	751.5	764.9	766.9
35°	705.2	717.6	727.9	742.3	745.3
37.5°	677.5	691.9	704.2	718.6	721.7
40°	650.8	664.1	678.5	693.9	698.0
42.5°	619.9	635.3	652.8	670.3	673.4
45°	588.0	607.6	627.1	644.6	649.7
47.5°	558.2	577.8	600.4	617.9	624.0
50°	525.3	547.9	570.6	591.1	597.3
52.5°	492.4	515.1	541.8	562.3	568.5
55°	460.6	482.2	513.0	533.6	539.7
57.5°	424.6	451.3	481.1	505.8	510.9
60°	389.6	416.4	450.3	473.9	482.2
62.5°	355.7	385.5	419.4	443.1	451.3
65°	318.7	351.6	386.5	412.2	420.5
67.5°	283.7	318.7	355.7	381.4	389.6
70°	247.8	282.7	321.8	349.5	356.7
72.5°	212.8	248.8	290.9	317.7	325.9
75°	176.8	214.9	258.0	286.8	296.1
77.5°	142.9	183.0	228.2	257.0	267.3
80°	112.1	153.2	198.4	229.3	237.5
82.5°	81.2	124.4	169.6	201.5	210.7
85°	54.5	97.7	143.9	174.8	185.0
87.5°	33.9	76.1	121.3	151.1	160.4
90°	20.8	78.2	134.2	172.8	183.9
92.5°	37.5	70.5	126.5	164.1	172.3
95°	94.3	78.2	121.8	158.4	169.1
97.5°	166.8	229.0	116.7	150.7	161.5
100°	252.6	305.8	142.8	145.6	154.3
102.5°	349.7	390.0	446.7	142.4	150.6
105°	452.2	481.5	526.9	565.9	521.1
107.5°	547.8	569.6	615.9	649.0	662.0
110°	643.8	662.6	707.4	734.0	746.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	737.0	758.1	795.0	816.2	830.2
115°	833.1	846.7	878.1	903.6	910.8
117.5°	919.9	931.9	967.2	987.3	995.5
120°	1007.0	1016.0	1044.4	1067.9	1073.2
122.5°	1089.4	1092.4	1123.1	1145.2	1149.5
125°	1166.4	1171.3	1194.1	1218.0	1225.6
127.5°	1241.5	1241.9	1269.8	1286.8	1292.5
130°	1312.5	1313.0	1333.8	1353.8	1360.0
132.5°	1378.8	1380.7	1398.9	1417.9	1422.5
135°	1444.0	1442.5	1455.6	1474.9	1484.1
137.5°	1502.8	1501.7	1513.2	1531.6	1535.2
140°	1560.2	1562.0	1566.1	1583.8	1590.5
142.5°	1610.6	1616.5	1616.9	1631.2	1635.3
145°	1663.6	1667.0	1667.0	1674.6	1681.7
147.5°	1704.8	1712.6	1711.1	1713.6	1719.2
150°	1750.4	1755.2	1753.8	1753.8	1755.2
152.5°	1787.6	1792.0	1789.1	1792.0	1790.6
155°	1822.9	1824.4	1820.0	1825.9	1821.5
157.5°	1853.8	1853.8	1847.9	1855.3	1847.9
160°	1880.3	1875.9	1874.4	1883.2	1874.4
162.5°	1903.8	1898.0	1896.5	1905.3	1895.0
165°	1923.0	1915.6	1915.6	1927.4	1914.1
167.5°	1939.2	1931.8	1930.3	1943.6	1928.9
170°	1952.4	1943.6	1945.0	1956.8	1942.1
172.5°	1961.2	1952.4	1953.9	1965.6	1949.5
175°	1967.1	1958.3	1959.8	1973.0	1955.3
177.5°	1971.5	1961.2	1964.2	1975.9	1958.3
180°	1967.1	1967.1	1967.1	1967.1	1967.1

(END OF REPORT)