

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: P1031920

Luminaire Tested: S123DIW-B775D1535UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031920
REPORT IS A COMBINATION OF REPORTS P992031 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1535UB50-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

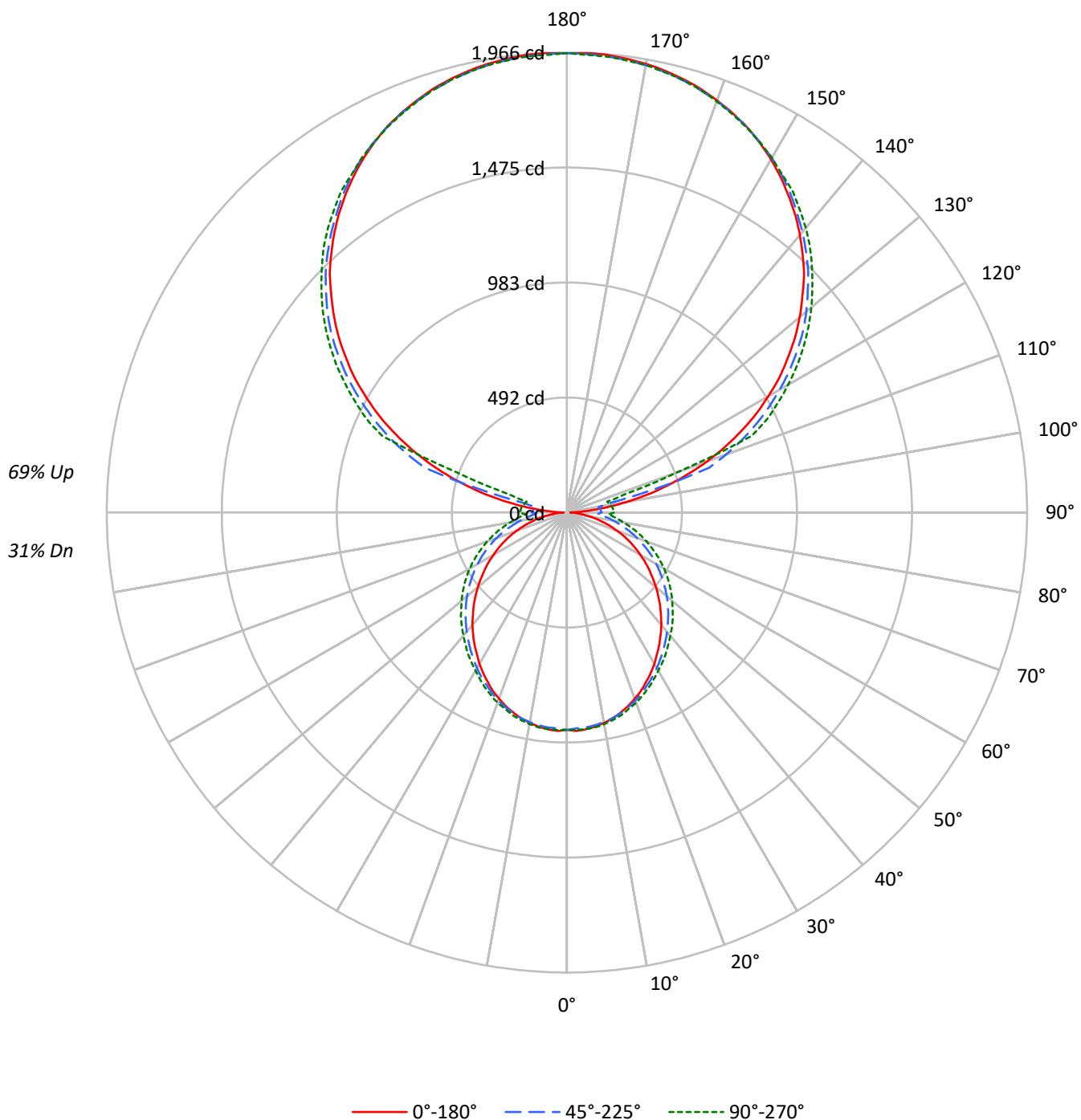
Lumens per Lamp: N/A
Luminaire Lumens: 9112.0 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	88	84	81	83	80	76	73	63	61	58	48	46	45	33	32	32
2	84	77	71	65	75	69	64	59	55	51	48	41	39	37	29	27	26
3	77	67	60	54	69	61	54	49	48	43	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	41	35	38	33	29	29	25	22	20	18	16
6	59	47	39	33	53	42	36	30	34	29	25	26	22	19	18	16	14
7	54	42	34	29	49	38	31	27	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	32	25	21	25	20	17	20	16	13	14	12	10
10	44	32	25	20	39	29	23	18	23	18	15	18	15	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10002	10002	10002
5°	10030	9709	9701
10°	9936	9446	9374
15°	9804	9155	9027
20°	9618	8832	8654
25°	9388	8467	8268
30°	9152	8137	7880
35°	8889	7791	7564
40°	8637	7475	7231
45°	8358	7168	6956
50°	8082	6864	6658
55°	7777	6552	6384
60°	7478	6234	6102
65°	7170	5895	5773
70°	6708	5515	5434
75°	6121	5079	5083
80°	5440	4642	4684
85°	4764	4286	4397

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8358 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	1.0
10°-20°	251.3	2.8
20°-30°	375.8	4.1
30°-40°	448.7	4.9
40°-50°	469.4	5.2
50°-60°	440.5	4.8
60°-70°	368.0	4.0
70°-80°	263.1	2.9
80°-90°	160.5	1.8
90°-100°	167.6	1.8
100°-110°	407.0	4.5
110°-120°	868.5	9.5
120°-130°	1068.8	11.7
130°-140°	1124.7	12.3
140°-150°	1042.8	11.4
150°-160°	839.0	9.2
160°-170°	541.5	5.9
170°-180°	186.6	2.0
0°-30°	715.2	7.8
0°-40°	1163.9	12.8
0°-60°	2073.9	22.8
0°-90°	2865.4	31.4
90°-120°	1443.2	15.8
90°-150°	4679.5	51.4
90°-180°	6247.0	68.6
0°-180°	9112.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	929	929	929	929	929	
5°	930	928	922	930	929	88
15°	886	889	888	898	897	250
25°	800	810	813	826	826	369
35°	688	704	718	733	737	430
45°	563	587	612	632	640	434
55°	429	463	499	526	534	384
65°	297	336	381	411	421	293
75°	161	208	259	292	305	172
85°	50	100	154	188	198	51
90°	15	79	149	190	203	14
95°	100	80	145	187	197	115
105°	443	483	395	166	178	469
115°	820	841	891	930	944	811
125°	1152	1164	1199	1223	1233	1030
135°	1433	1441	1458	1480	1481	1103
145°	1652	1661	1664	1675	1679	1034
155°	1819	1816	1817	1825	1816	838
165°	1918	1914	1912	1924	1914	542
175°	1963	1956	1957	1968	1956	187
180°	1963	1963	1963	1963	1963	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	929.2	929.2	929.2	929.2	929.2
2.5°	934.3	931.3	923.2	931.3	930.3
5°	930.3	928.2	922.2	930.3	929.2
7.5°	923.2	923.2	917.1	927.2	926.2
10°	913.1	915.1	910.0	920.1	918.1
12.5°	900.9	903.9	900.9	910.0	908.0
15°	885.7	888.8	887.7	897.9	896.9
17.5°	867.5	873.6	872.6	881.7	879.6
20°	847.3	853.3	855.4	864.5	865.5
22.5°	826.0	832.1	835.1	847.3	846.2
25°	799.7	809.8	812.8	826.0	826.0
27.5°	774.4	785.5	791.6	802.7	803.7
30°	747.0	760.2	768.3	780.4	780.4
32.5°	716.7	731.9	743.0	756.2	759.2
35°	688.3	704.5	717.7	732.9	736.9
37.5°	658.0	676.2	691.4	708.6	711.6
40°	627.6	645.8	666.1	683.3	687.3
42.5°	594.2	617.5	638.7	658.0	664.0
45°	562.8	587.1	612.4	631.6	639.7
47.5°	529.4	556.7	585.1	606.3	612.4
50°	497.0	525.4	556.7	580.0	587.1
52.5°	462.6	493.0	528.4	552.7	561.8
55°	429.2	462.6	499.0	526.4	534.5
57.5°	396.8	431.2	470.7	498.0	507.1
60°	362.4	398.8	440.3	468.7	479.8
62.5°	330.0	367.4	412.0	440.3	450.5
65°	296.6	336.1	380.6	411.0	421.1
67.5°	263.2	304.7	349.2	382.6	390.7
70°	227.8	271.3	319.9	352.3	362.4
72.5°	195.4	238.9	289.5	322.9	333.0
75°	160.9	208.5	259.1	292.5	304.7
77.5°	131.6	179.2	229.8	265.2	274.3
80°	100.2	149.8	202.5	236.9	247.0
82.5°	72.9	123.5	177.1	211.6	221.7
85°	49.6	100.2	153.9	188.3	198.4
87.5°	30.4	81.0	132.6	167.0	177.1
90°	14.7	78.8	149.4	189.6	202.7
92.5°	45.6	80.5	144.2	187.8	198.4
95°	100.1	79.8	145.4	187.0	197.1
97.5°	172.0	167.7	140.8	182.8	194.4
100°	255.6	317.2	136.2	177.2	188.8
102.5°	350.9	398.1	189.9	170.1	183.2
105°	442.8	483.1	395.3	165.6	177.6
107.5°	539.5	573.8	637.2	440.0	258.0
110°	636.2	666.1	722.6	700.8	500.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	729.5	753.9	808.4	846.8	853.0
115°	820.4	841.3	890.8	929.7	943.6
117.5°	910.9	929.2	970.9	1006.8	1016.4
120°	992.9	1011.1	1048.9	1083.9	1091.0
122.5°	1077.5	1089.8	1127.0	1156.5	1165.1
125°	1152.4	1164.0	1199.3	1223.4	1233.4
127.5°	1228.2	1238.9	1271.5	1296.1	1300.3
130°	1298.2	1308.9	1335.0	1360.0	1363.2
132.5°	1364.3	1376.0	1395.5	1419.6	1422.3
135°	1432.9	1440.6	1457.5	1480.2	1480.8
137.5°	1491.2	1501.9	1511.9	1535.4	1537.6
140°	1548.5	1557.3	1564.7	1585.7	1587.9
142.5°	1602.5	1610.3	1614.6	1632.2	1632.8
145°	1652.1	1661.3	1664.2	1675.2	1679.2
147.5°	1699.2	1706.5	1709.4	1715.4	1712.2
150°	1743.0	1747.4	1750.3	1753.2	1750.8
152.5°	1782.4	1783.8	1785.3	1791.1	1783.8
155°	1818.8	1815.9	1817.4	1824.7	1815.9
157.5°	1848.0	1848.0	1846.5	1855.3	1843.6
160°	1874.3	1872.8	1871.3	1880.1	1869.9
162.5°	1899.1	1894.7	1893.2	1903.4	1894.7
165°	1918.0	1913.6	1912.2	1923.9	1913.6
167.5°	1934.1	1928.2	1928.2	1939.9	1928.2
170°	1947.2	1941.4	1941.4	1953.0	1941.4
172.5°	1955.9	1948.6	1950.1	1961.8	1948.6
175°	1963.2	1955.9	1957.4	1967.6	1955.9
177.5°	1966.1	1958.9	1960.3	1972.0	1957.4
180°	1963.2	1963.2	1963.2	1963.2	1963.2

(END OF REPORT)