

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: P1031843

Luminaire Tested: S123DIW-B775D1030UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031843
REPORT IS A COMBINATION OF REPORTS P991843 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1030UB27-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

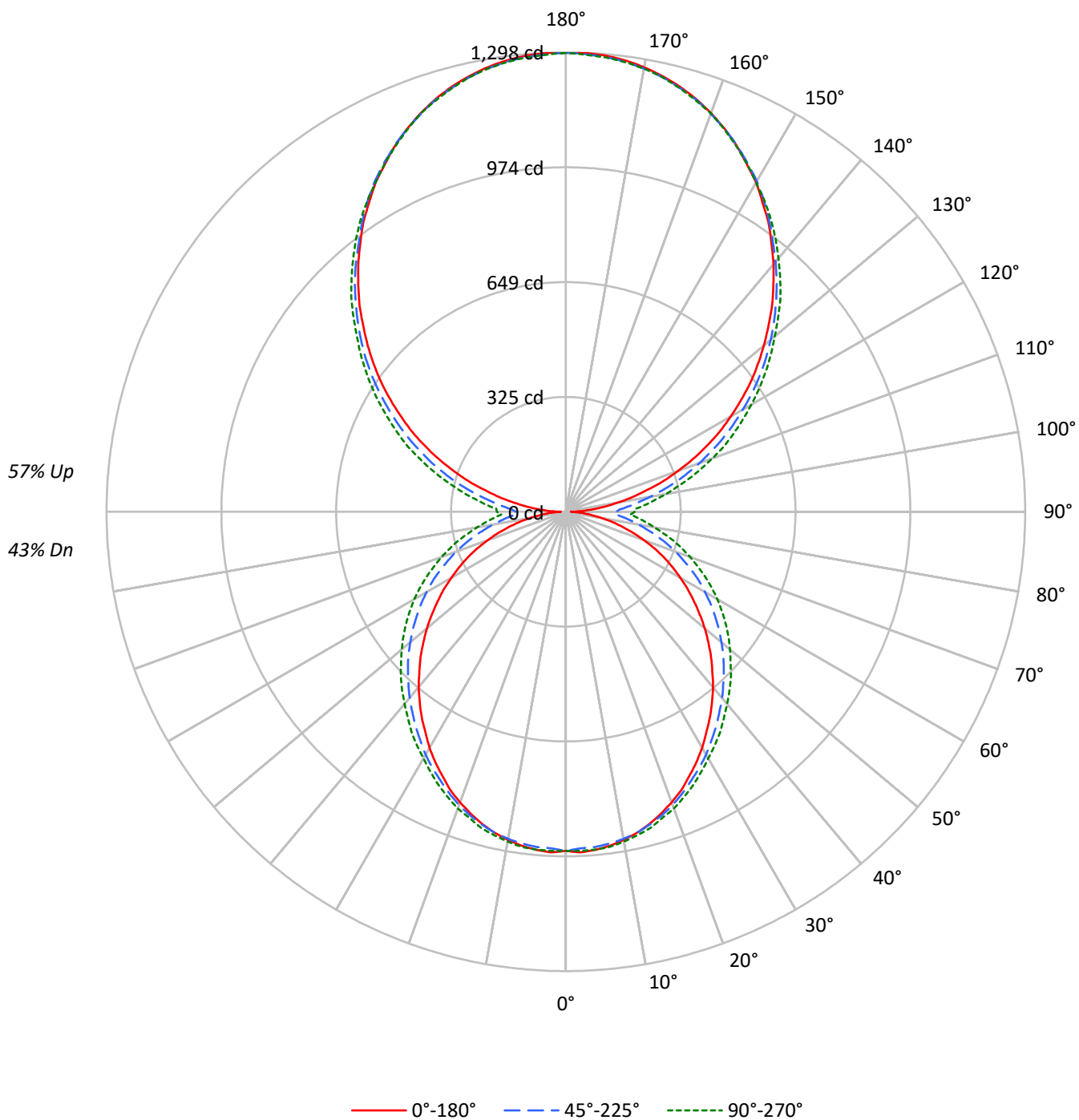
Lumens per Lamp: N/A
Luminaire Lumens: 6815.9 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.4
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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50
1	95	91	86	83	87	83	79	76	68	66	63	55	53	52	43	41	40
2	86	79	72	67	79	72	66	62	59	55	52	48	45	42	37	35	33
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	33	30	28
4	72	61	53	46	65	56	49	43	46	41	36	37	33	30	29	26	24
5	66	54	46	39	60	49	42	37	41	35	31	33	29	26	26	23	21
6	60	48	40	34	55	44	37	32	37	31	27	30	26	23	23	20	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16
8	52	39	32	26	47	36	29	24	30	25	21	25	21	18	20	17	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	26	21	41	30	24	19	26	20	17	21	17	14	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10313	10313	10313
5°	10342	10010	10002
10°	10244	9739	9665
15°	10109	9440	9307
20°	9917	9106	8923
25°	9679	8730	8525
30°	9437	8391	8125
35°	9165	8033	7800
40°	8906	7706	7456
45°	8618	7390	7172
50°	8334	7077	6864
55°	8018	6756	6582
60°	7709	6428	6291
65°	7392	6078	5953
70°	6915	5685	5602
75°	6311	5238	5242
80°	5608	4784	4830
85°	4908	4417	4535

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8618 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.9	1.3
10°-20°	259.1	3.8
20°-30°	387.5	5.7
30°-40°	462.6	6.8
40°-50°	484.0	7.1
50°-60°	454.2	6.7
60°-70°	379.4	5.6
70°-80°	271.3	4.0
80°-90°	164.1	2.4
90°-100°	184.9	2.7
100°-110°	327.2	4.8
110°-120°	479.9	7.0
120°-130°	594.3	8.7
130°-140°	648.8	9.5
140°-150°	628.0	9.2
150°-160°	526.5	7.7
160°-170°	350.5	5.1
170°-180°	122.7	1.8
0°-30°	737.5	10.8
0°-40°	1200.1	17.6
0°-60°	2138.3	31.4
0°-90°	2953.1	43.3
90°-120°	992.1	14.6
90°-150°	2863.1	42.0
90°-180°	3863.0	56.7
0°-180°	6815.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	958	958	958	958	958	
5°	959	957	951	959	958	91
15°	913	916	915	926	925	257
25°	824	835	838	852	852	380
35°	710	726	740	756	760	444
45°	580	605	631	651	660	447
55°	442	477	514	543	551	396
65°	306	346	392	424	434	302
75°	166	215	267	302	314	177
85°	51	103	159	194	205	53
90°	15	76	142	182	194	14
95°	72	119	179	215	226	75
105°	238	265	319	348	359	254
115°	438	454	489	515	523	434
125°	637	640	668	686	689	568
135°	824	829	840	854	858	635
145°	998	999	1002	1010	1010	623
155°	1142	1142	1143	1147	1140	526
165°	1244	1241	1241	1247	1240	351
175°	1294	1290	1290	1296	1289	123
180°	1297	1297	1297	1297	1297	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	958.1	958.1	958.1	958.1	958.1
2.5°	963.3	960.2	951.8	960.2	959.2
5°	959.2	957.1	950.8	959.2	958.1
7.5°	951.8	951.8	945.6	956.0	955.0
10°	941.4	943.5	938.3	948.7	946.6
12.5°	928.9	932.0	928.9	938.3	936.2
15°	913.2	916.4	915.3	925.8	924.7
17.5°	894.4	900.7	899.7	909.1	907.0
20°	873.6	879.8	881.9	891.3	892.4
22.5°	851.7	857.9	861.0	873.6	872.5
25°	824.5	835.0	838.1	851.7	851.7
27.5°	798.4	809.9	816.2	827.6	828.7
30°	770.2	783.8	792.2	804.7	804.7
32.5°	738.9	754.6	766.1	779.6	782.8
35°	709.7	726.4	740.0	755.6	759.8
37.5°	678.4	697.2	712.8	730.6	733.7
40°	647.1	665.9	686.7	704.5	708.7
42.5°	612.6	636.7	658.6	678.4	684.7
45°	580.3	605.3	631.4	651.3	659.6
47.5°	545.9	574.0	603.3	625.2	631.4
50°	512.5	541.7	574.0	598.0	605.3
52.5°	477.0	508.3	544.8	569.9	579.2
55°	442.5	477.0	514.5	542.7	551.1
57.5°	409.1	444.6	485.3	513.5	522.9
60°	373.6	411.2	454.0	483.2	494.7
62.5°	340.2	378.9	424.8	454.0	464.4
65°	305.8	346.5	392.4	423.7	434.2
67.5°	271.4	314.2	360.1	394.5	402.9
70°	234.8	279.7	329.8	363.2	373.6
72.5°	201.4	246.3	298.5	332.9	343.4
75°	165.9	215.0	267.2	301.6	314.2
77.5°	135.7	184.7	236.9	273.4	282.8
80°	103.3	154.5	208.7	244.2	254.7
82.5°	75.1	127.3	182.6	218.1	228.6
85°	51.1	103.3	158.6	194.1	204.6
87.5°	31.3	83.5	136.7	172.2	182.6
90°	14.6	75.9	142.3	181.9	194.5
92.5°	43.1	94.1	152.4	189.8	197.2
95°	71.6	119.4	178.7	215.2	225.6
97.5°	109.2	151.9	207.1	243.5	252.9
100°	147.9	187.5	240.6	273.9	286.3
102.5°	192.7	225.0	279.1	311.4	320.8
105°	237.5	264.6	318.7	347.9	359.4
107.5°	289.5	312.4	359.3	390.5	398.9
110°	337.4	358.1	402.0	433.1	439.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	388.3	403.9	443.5	474.7	484.1
115°	438.2	453.7	489.3	515.4	522.7
117.5°	490.1	499.5	533.0	558.0	563.3
120°	537.0	548.3	577.6	600.6	605.8
122.5°	586.9	593.1	623.3	643.3	647.5
125°	636.7	639.8	668.1	685.9	689.1
127.5°	683.6	688.7	712.8	727.6	730.8
130°	730.5	737.6	755.5	771.2	770.3
132.5°	776.3	784.5	798.0	811.7	813.9
135°	824.2	829.2	839.7	854.4	857.6
137.5°	868.0	872.0	882.4	894.0	896.2
140°	912.7	917.8	922.1	936.6	934.7
142.5°	954.5	958.6	960.6	973.2	973.3
145°	998.3	999.4	1002.4	1009.7	1009.8
147.5°	1035.0	1039.1	1042.1	1045.2	1043.3
150°	1074.7	1076.8	1078.8	1078.8	1074.8
152.5°	1107.3	1110.4	1111.4	1113.5	1108.4
155°	1142.0	1142.0	1143.0	1147.1	1139.9
157.5°	1171.5	1170.5	1171.5	1175.6	1169.5
160°	1199.0	1197.0	1197.0	1202.1	1198.0
162.5°	1223.5	1220.4	1221.4	1226.5	1219.4
165°	1243.8	1240.8	1240.8	1246.9	1239.8
167.5°	1261.2	1257.1	1258.1	1264.2	1258.1
170°	1275.4	1271.4	1271.4	1278.5	1271.4
172.5°	1286.6	1282.6	1282.6	1288.7	1281.5
175°	1293.8	1289.7	1289.7	1295.8	1288.7
177.5°	1297.8	1293.8	1293.8	1299.9	1292.7
180°	1296.8	1296.8	1296.8	1296.8	1296.8

(END OF REPORT)