

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: P1031864

Luminaire Tested: S123DIW-B775D1030UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031864
REPORT IS A COMBINATION OF REPORTS P991900 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1030UB50-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

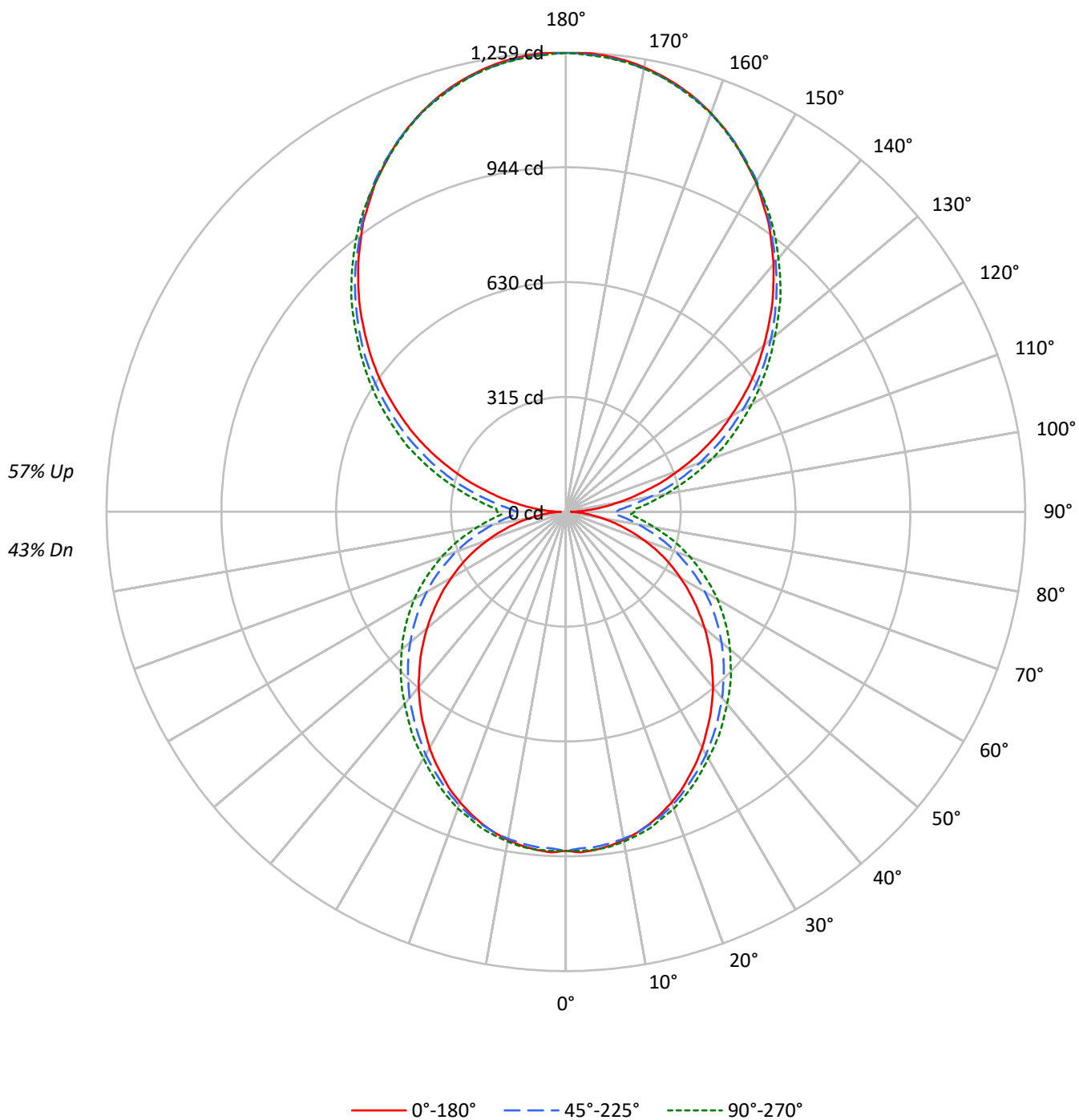
Lumens per Lamp: N/A
Luminaire Lumens: 6611.0 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	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	1.3
10°-20°	251.3	3.8
20°-30°	375.8	5.7
30°-40°	448.7	6.8
40°-50°	469.4	7.1
50°-60°	440.5	6.7
60°-70°	368.0	5.6
70°-80°	263.1	4.0
80°-90°	159.2	2.4
90°-100°	179.4	2.7
100°-110°	317.4	4.8
110°-120°	465.5	7.0
120°-130°	576.4	8.7
130°-140°	629.3	9.5
140°-150°	609.1	9.2
150°-160°	510.7	7.7
160°-170°	340.0	5.1
170°-180°	119.0	1.8
0°-30°	715.2	10.8
0°-40°	1163.9	17.6
0°-60°	2073.9	31.4
0°-90°	2864.2	43.3
90°-120°	962.2	14.6
90°-150°	2777.1	42.0
90°-180°	3747.0	56.7
0°-180°	6611.0	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°	14	74	138	176	188	14
95°	69	116	173	209	219	73
105°	230	257	309	338	349	246
115°	425	440	474	500	507	421
125°	618	621	648	665	668	551
135°	799	804	814	829	832	616
145°	968	969	972	979	980	605
155°	1108	1108	1109	1113	1106	510
165°	1206	1204	1204	1210	1202	340
175°	1255	1251	1251	1257	1250	119
180°	1258	1258	1258	1258	1258	

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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°	14.2	73.7	138.1	176.5	188.5
92.5°	41.7	91.3	147.8	184.2	191.3
95°	69.4	115.8	173.3	208.7	218.8
97.5°	105.9	147.4	200.8	236.2	245.3
100°	143.5	181.8	233.4	265.6	277.7
102.5°	186.9	218.2	270.7	302.0	311.2
105°	230.4	256.7	309.1	337.5	348.6
107.5°	280.8	303.0	348.4	378.8	386.9
110°	327.2	347.4	389.9	420.1	426.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	376.6	391.7	430.2	460.5	469.6
115°	425.1	440.1	474.5	499.8	506.9
117.5°	475.4	484.5	517.0	541.3	546.4
120°	520.8	531.8	560.3	582.6	587.7
122.5°	569.2	575.3	604.7	623.9	628.1
125°	617.6	620.6	648.0	665.2	668.4
127.5°	663.1	668.0	691.3	705.7	708.8
130°	708.5	715.4	732.8	748.0	747.2
132.5°	753.0	760.9	774.1	787.4	789.5
135°	799.4	804.3	814.5	828.8	831.8
137.5°	841.9	845.8	855.9	867.2	869.3
140°	885.4	890.3	894.3	908.5	906.7
142.5°	925.9	929.8	931.8	944.0	944.1
145°	968.4	969.3	972.3	979.4	979.5
147.5°	1003.9	1007.9	1010.8	1013.8	1012.0
150°	1042.5	1044.4	1046.4	1046.4	1042.5
152.5°	1074.1	1077.0	1078.0	1080.0	1075.1
155°	1107.7	1107.7	1108.7	1112.6	1105.7
157.5°	1136.3	1135.3	1136.3	1140.3	1134.4
160°	1163.0	1161.0	1161.0	1166.0	1162.0
162.5°	1186.7	1183.8	1184.8	1189.7	1182.8
165°	1206.5	1203.5	1203.5	1209.5	1202.5
167.5°	1223.3	1219.3	1220.3	1226.3	1220.3
170°	1237.1	1233.2	1233.2	1240.1	1233.2
172.5°	1248.0	1244.0	1244.0	1250.0	1243.1
175°	1254.9	1251.0	1251.0	1256.9	1250.0
177.5°	1258.9	1254.9	1254.9	1260.8	1253.9
180°	1257.9	1257.9	1257.9	1257.9	1257.9

(END OF REPORT)