

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: P1031957

Luminaire Tested: S123DIW-B775D755UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031957
REPORT IS A COMBINATION OF REPORTS P992107 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D755UB27-4F0-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

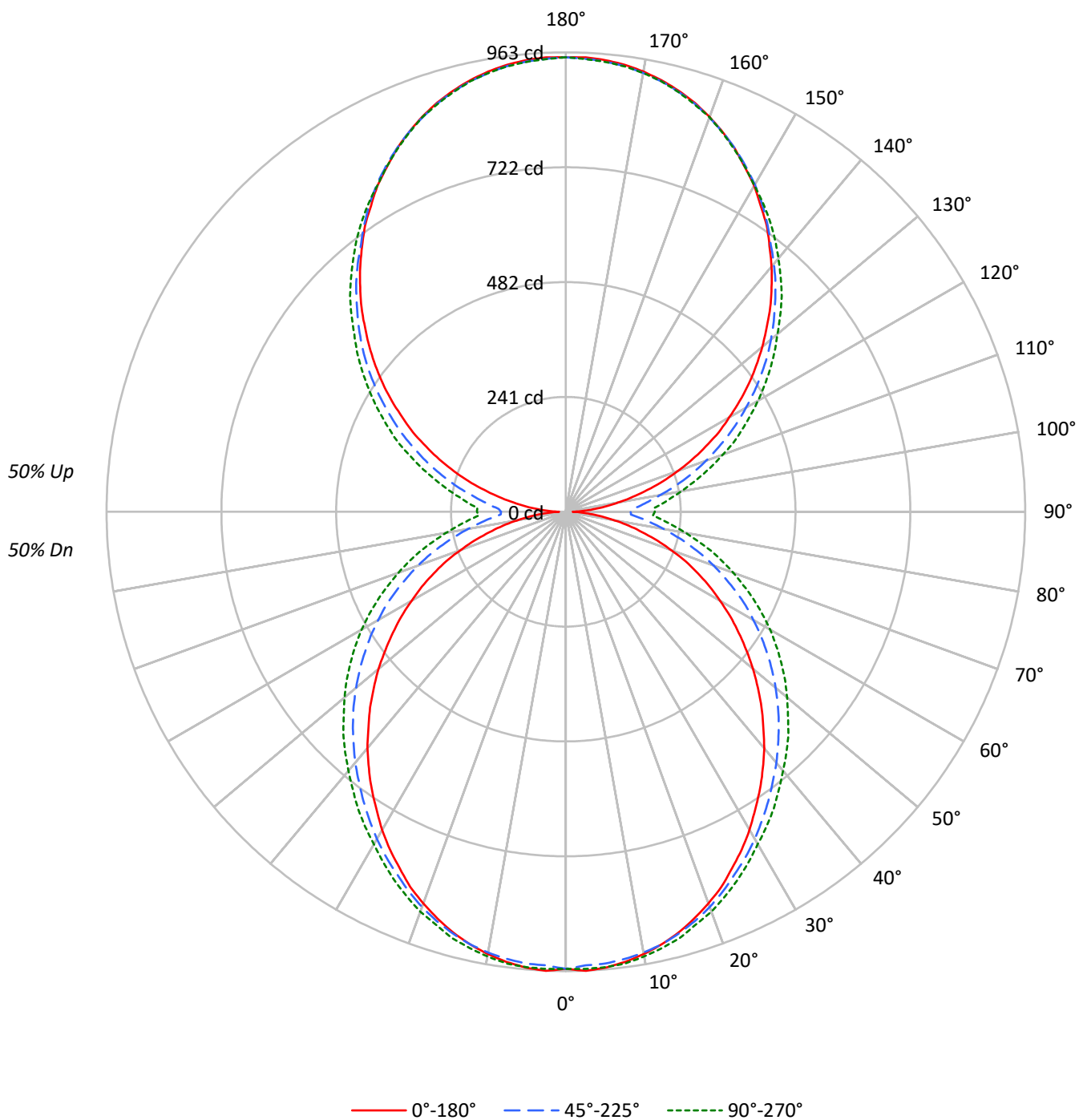
Lumens per Lamp: N/A
Luminaire Lumens: 5861.9 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 59.1
Input Voltage (V):
Input Current (A_{in}): 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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56
1	97	92	88	84	89	85	81	78	72	69	66	59	57	56	48	47	46
2	88	80	73	68	81	74	68	63	62	58	54	52	48	46	42	40	38
3	80	70	62	56	73	64	58	52	54	49	45	45	41	38	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	29	27
5	67	55	46	40	61	51	43	38	43	37	33	36	31	28	29	26	23
6	61	49	41	35	56	45	38	32	39	33	28	32	28	24	26	23	20
7	57	44	36	30	52	41	34	28	35	29	25	29	25	21	24	21	18
8	53	40	32	27	48	37	30	25	32	26	22	27	22	19	22	19	16
9	49	36	29	24	45	34	27	22	29	24	20	25	20	17	20	17	14
10	46	33	26	21	42	31	24	20	27	21	18	23	18	15	19	16	13

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	1.6
10°-20°	259.1	4.4
20°-30°	387.5	6.6
30°-40°	462.6	7.9
40°-50°	484.0	8.3
50°-60°	454.2	7.7
60°-70°	379.4	6.5
70°-80°	271.3	4.6
80°-90°	163.4	2.8
90°-100°	162.8	2.8
100°-110°	260.2	4.4
110°-120°	365.8	6.2
120°-130°	444.2	7.6
130°-140°	480.1	8.2
140°-150°	462.1	7.9
150°-160°	386.8	6.6
160°-170°	257.5	4.4
170°-180°	90.2	1.5
0°-30°	737.5	12.6
0°-40°	1200.1	20.5
0°-60°	2138.3	36.5
0°-90°	2952.4	50.4
90°-120°	788.8	13.5
90°-150°	2175.1	37.1
90°-180°	2910.0	49.6
0°-180°	5861.9	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°	14	73	136	174	186	13
95°	56	102	159	194	204	58
105°	177	203	255	284	295	189
115°	323	338	374	400	408	320
125°	469	471	500	519	523	418
135°	606	610	620	636	640	467
145°	734	734	736	744	745	458
155°	839	839	840	843	838	386
165°	914	912	912	916	911	258
175°	950	948	948	952	947	90
180°	953	953	953	953	953	

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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°	14.3	72.9	135.9	174.4	186.4
92.5°	35.0	84.3	141.0	177.7	185.6
95°	55.7	101.6	158.7	194.1	204.5
97.5°	83.0	124.3	177.9	213.0	222.6
100°	111.2	149.1	200.8	233.4	245.3
102.5°	143.8	175.3	227.5	259.0	268.7
105°	176.7	203.3	254.9	284.1	295.0
107.5°	214.6	237.3	283.1	313.5	322.2
110°	249.5	269.7	313.0	343.1	350.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	287.0	302.3	341.9	371.8	381.2
115°	323.3	338.0	374.1	400.0	407.5
117.5°	361.5	370.6	404.6	429.6	435.8
120°	395.6	405.3	436.0	459.2	465.0
122.5°	432.3	437.4	468.2	489.0	494.0
125°	468.6	470.9	499.7	518.6	522.9
127.5°	503.1	506.6	531.2	547.6	551.9
130°	537.5	542.5	561.1	577.9	579.0
132.5°	570.9	576.9	591.0	606.1	609.6
135°	606.1	609.5	620.2	636.1	639.8
137.5°	638.3	640.9	650.5	663.4	666.5
140°	670.9	674.6	678.6	693.4	693.4
142.5°	701.6	704.3	705.8	718.6	720.1
145°	733.7	734.2	736.5	744.0	745.2
147.5°	760.4	763.4	765.7	768.8	768.5
150°	789.6	791.1	792.6	792.6	790.2
152.5°	813.6	815.8	816.6	818.1	814.3
155°	839.0	839.0	839.8	842.8	837.5
157.5°	860.7	860.0	860.7	863.7	859.2
160°	880.9	879.4	879.4	883.2	880.2
162.5°	898.9	896.6	897.4	901.1	895.9
165°	913.9	911.6	911.6	916.1	910.9
167.5°	926.6	923.6	924.3	928.8	924.3
170°	937.1	934.1	934.1	939.3	934.1
172.5°	945.3	942.3	942.3	946.8	941.6
175°	950.5	947.5	947.5	952.0	946.8
177.5°	953.5	950.5	950.5	955.0	949.8
180°	952.8	952.8	952.8	952.8	952.8

(END OF REPORT)