

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: P1031956

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031956
REPORT IS A COMBINATION OF REPORTS P992106 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-D
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

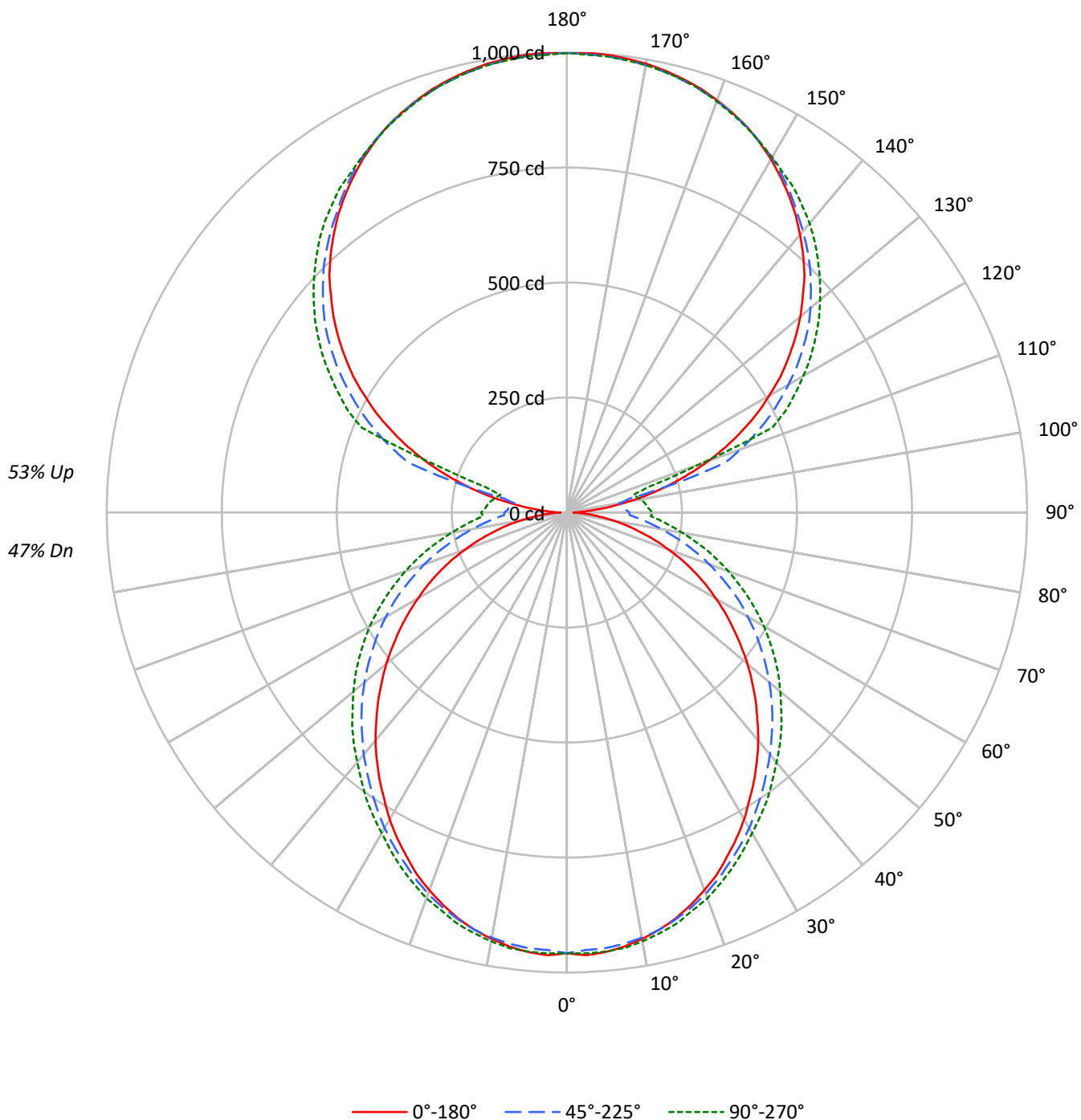
Lumens per Lamp: N/A
Luminaire Lumens: 6267.0 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 59.1
Input Voltage (V):
Input Current (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
RCR																	
0	106	106	106	106	98	98	98	98	82	82	82		67	67	67		53
1	96	91	87	83	88	84	80	77	70	67	65		57	56	54		46
2	87	79	73	67	80	73	67	62	61	57	53		50	47	44		40
3	79	69	62	56	72	64	57	52	53	48	44		44	40	37		35
4	72	61	53	47	66	56	49	44	47	42	37		39	35	31		31
5	66	54	46	40	61	50	43	37	42	36	32		35	30	27		28
6	61	49	40	34	56	45	37	32	38	32	28		31	27	23		25
7	56	44	36	30	51	40	33	28	34	29	24		28	24	21		23
8	52	40	32	26	48	37	30	25	31	26	22		26	22	18		21
9	49	36	29	23	44	34	27	22	29	23	19		24	20	16		19
10	45	33	26	21	42	31	24	20	26	21	17		22	18	15		18

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	1.5
10°-20°	259.1	4.1
20°-30°	387.5	6.2
30°-40°	462.6	7.4
40°-50°	484.0	7.7
50°-60°	454.2	7.2
60°-70°	379.4	6.1
70°-80°	271.3	4.3
80°-90°	163.4	2.6
90°-100°	136.7	2.2
100°-110°	244.9	3.9
110°-120°	467.1	7.5
120°-130°	558.2	8.9
130°-140°	578.7	9.2
140°-150°	531.9	8.5
150°-160°	426.9	6.8
160°-170°	275.5	4.4
170°-180°	94.9	1.5
0°-30°	737.5	11.8
0°-40°	1200.1	19.1
0°-60°	2138.3	34.1
0°-90°	2952.4	47.1
90°-120°	848.6	13.5
90°-150°	2517.3	40.2
90°-180°	3315.0	52.9
0°-180°	6267.0	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	12
95°	57	67	126	164	174	63
105°	229	263	241	139	150	243
115°	420	437	481	514	525	415
125°	588	594	627	650	659	526
135°	730	733	748	769	772	562
145°	841	845	847	856	861	526
155°	925	924	925	928	924	426
165°	976	974	973	979	974	276
175°	999	995	996	1001	995	95
180°	999	999	999	999	999	

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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	135.7	174.2	186.2
92.5°	29.6	70.0	128.9	168.5	178.6
95°	56.8	67.0	126.3	163.9	174.3
97.5°	92.8	109.6	120.8	158.1	169.2
100°	134.8	183.1	115.3	151.5	162.7
102.5°	182.7	221.6	139.4	144.2	156.1
105°	229.4	262.7	240.8	138.7	149.6
107.5°	278.2	306.7	360.7	274.6	186.8
110°	326.9	351.5	401.5	404.1	306.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	374.4	394.2	441.9	474.7	482.6
115°	420.0	437.0	481.2	513.8	525.0
117.5°	466.0	479.6	518.8	549.8	558.9
120°	507.3	519.2	555.8	585.8	593.1
122.5°	550.4	557.7	592.9	619.6	627.7
125°	587.9	593.8	627.1	650.4	659.2
127.5°	626.4	631.4	661.2	684.3	690.1
130°	662.1	667.0	690.9	713.6	718.4
132.5°	695.2	701.1	719.0	740.7	745.8
135°	730.1	733.4	747.9	768.9	771.9
137.5°	759.8	764.6	773.4	793.8	797.6
140°	788.3	792.8	798.2	816.8	820.5
142.5°	815.8	819.2	821.5	837.3	840.3
145°	841.0	845.2	846.7	856.5	860.7
147.5°	864.5	868.2	869.7	874.3	874.8
150°	886.8	889.0	890.5	892.0	891.8
152.5°	906.8	907.6	908.3	911.3	907.6
155°	925.4	923.9	924.6	928.3	923.9
157.5°	940.2	940.2	939.5	943.9	938.0
160°	953.6	952.8	952.1	956.5	951.3
162.5°	966.2	963.9	963.2	968.4	963.9
165°	975.8	973.6	972.9	978.8	973.6
167.5°	984.0	981.0	981.0	987.0	981.0
170°	990.7	987.7	987.7	993.6	987.7
172.5°	995.1	991.4	992.1	998.1	991.4
175°	998.8	995.1	995.9	1001.1	995.1
177.5°	1000.3	996.6	997.3	1003.3	995.9
180°	998.8	998.8	998.8	998.8	998.8

(END OF REPORT)