

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: P1031926

Luminaire Tested: S123DIW-B775D460UB27-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031926
REPORT IS A COMBINATION OF REPORTS P992040 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D460UB27-4F0-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

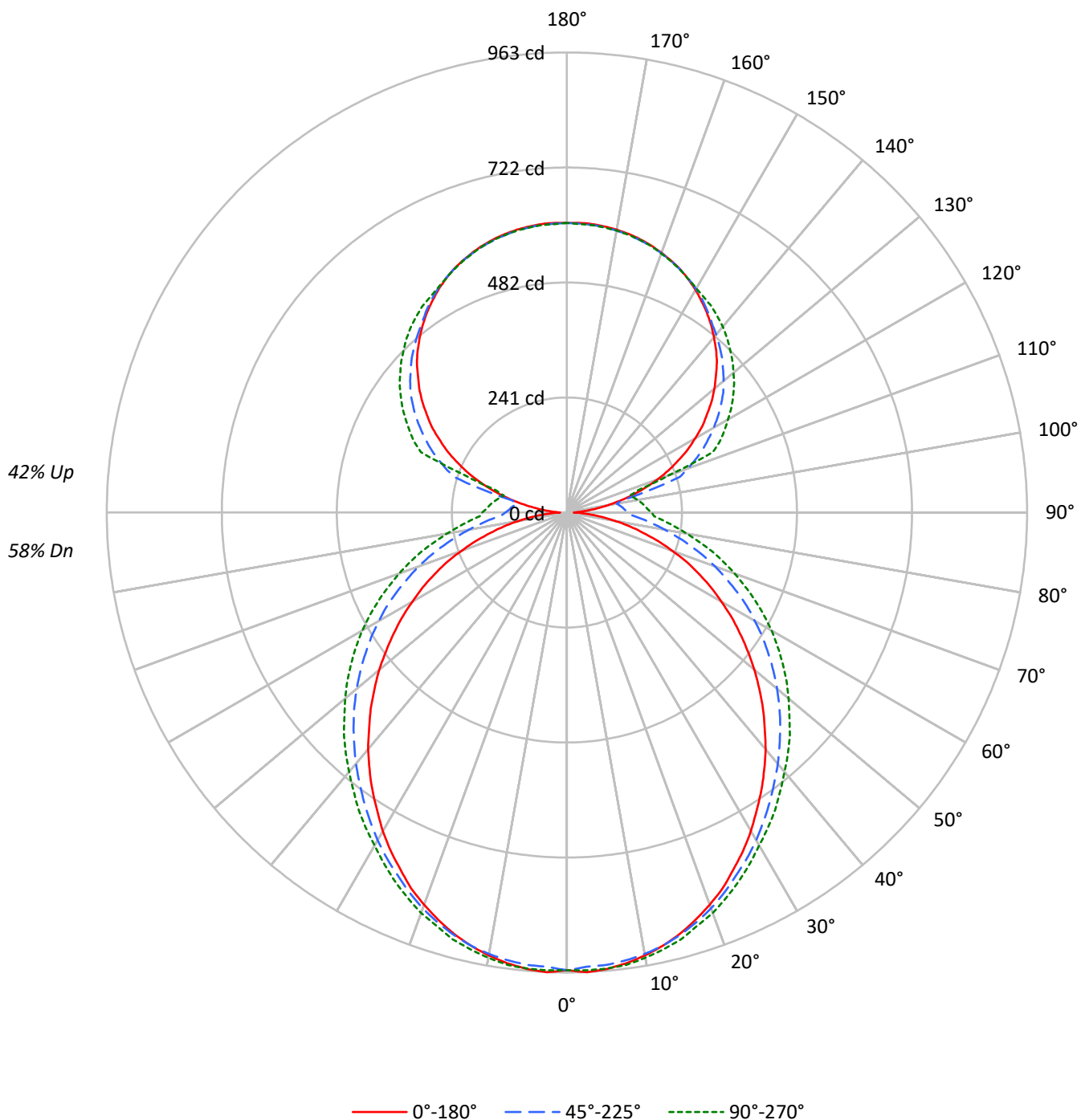
Lumens per Lamp: N/A
Luminaire Lumens: 5069.0 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 49.1
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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	64	64	64
1	98	93	89	85	91	87	83	80	75	72	70	64	62	60	54	53	51
2	89	81	74	69	83	76	70	65	65	61	57	56	52	49	47	45	42
3	81	71	63	57	75	66	59	53	57	52	47	49	45	41	41	38	36
4	74	62	54	48	68	58	51	45	51	45	40	43	39	35	37	33	30
5	68	56	47	41	63	52	44	38	45	39	34	39	34	30	33	29	26
6	62	50	41	35	58	47	39	33	41	34	30	35	30	26	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	27	23	20
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	19	23	19	16
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	21	18	15

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	1.8
10°-20°	259.1	5.1
20°-30°	387.5	7.6
30°-40°	462.6	9.1
40°-50°	484.0	9.5
50°-60°	454.2	9.0
60°-70°	379.4	7.5
70°-80°	271.3	5.4
80°-90°	162.6	3.2
90°-100°	122.8	2.4
100°-110°	177.9	3.5
110°-120°	303.0	6.0
120°-130°	349.9	6.9
130°-140°	356.2	7.0
140°-150°	323.8	6.4
150°-160°	259.0	5.1
160°-170°	167.2	3.3
170°-180°	57.6	1.1
0°-30°	737.5	14.5
0°-40°	1200.1	23.7
0°-60°	2138.3	42.2
0°-90°	2951.6	58.2
90°-120°	603.7	11.9
90°-150°	1633.6	32.2
90°-180°	2117.0	41.8
0°-180°	5069.0	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	70	129	166	177	11
95°	39	61	117	153	163	42
105°	142	172	177	126	137	151
115°	257	272	314	343	354	254
125°	358	362	394	416	425	320
135°	444	446	459	479	483	342
145°	511	513	514	523	527	320
155°	562	561	561	563	561	259
165°	592	591	590	594	591	167
175°	606	604	604	608	604	58
180°	606	606	606	606	606	

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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°	14.1	69.7	128.7	166.0	177.4
92.5°	22.9	65.1	121.3	158.9	168.7
95°	39.0	61.2	117.3	152.8	163.2
97.5°	60.4	85.4	111.5	146.4	157.3
100°	85.5	127.9	105.7	139.6	150.4
102.5°	114.1	149.3	117.8	132.3	143.6
105°	142.5	172.5	176.9	126.4	136.7
107.5°	171.7	197.6	247.2	206.0	156.4
110°	200.8	223.1	269.9	282.1	226.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.7	247.4	292.0	322.1	330.6
115°	256.9	272.1	313.8	343.4	353.5
117.5°	284.8	296.4	334.1	362.7	371.6
120°	309.5	318.8	354.5	382.1	389.4
122.5°	335.6	340.9	375.0	400.2	408.0
125°	357.9	361.5	393.6	416.4	424.6
127.5°	381.4	384.0	412.3	434.6	441.0
130°	403.0	405.6	428.3	449.9	455.3
132.5°	422.7	426.3	443.2	463.8	469.8
135°	443.9	445.5	458.8	478.9	482.8
137.5°	461.9	464.4	472.6	491.5	495.9
140°	478.8	481.5	486.0	503.4	507.7
142.5°	495.4	497.1	498.5	513.4	517.3
145°	510.7	512.9	513.8	523.0	527.2
147.5°	524.6	526.9	527.8	531.8	533.7
150°	538.1	539.5	540.4	541.3	542.0
152.5°	550.3	550.7	551.2	553.0	550.7
155°	561.5	560.6	561.1	563.3	560.6
157.5°	570.5	570.5	570.1	572.8	569.2
160°	578.6	578.2	577.7	580.4	577.3
162.5°	586.3	584.9	584.5	587.7	584.9
165°	592.2	590.8	590.4	594.0	590.8
167.5°	597.1	595.3	595.3	598.9	595.3
170°	601.2	599.4	599.4	603.0	599.4
172.5°	603.9	601.6	602.1	605.7	601.6
175°	606.1	603.9	604.3	607.5	603.9
177.5°	607.0	604.8	605.2	608.8	604.3
180°	606.1	606.1	606.1	606.1	606.1

(END OF REPORT)