

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: P1031927

Luminaire Tested: S123DIW-B775D460UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031927
REPORT IS A COMBINATION OF REPORTS P992041 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-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

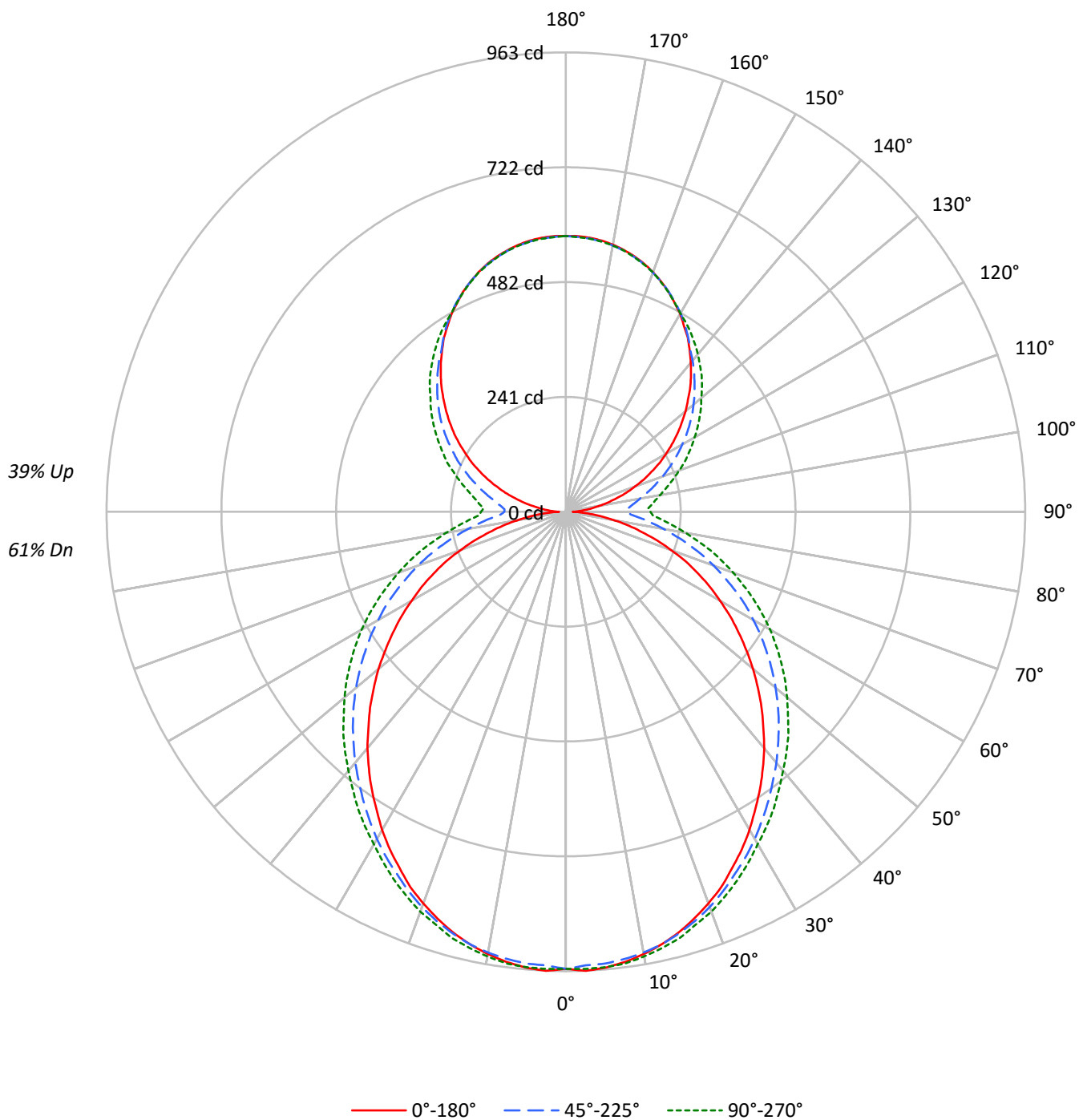
Lumens per Lamp: N/A
Luminaire Lumens: 4822.9 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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
RCR																	
0	110	110	110	110	103	103	103	103	90	90	90		77	77	77		66
1	99	94	90	86	92	88	84	81	77	74	71		66	64	62		57
2	90	81	75	69	83	76	70	65	66	62	58		57	54	51		49
3	81	71	63	57	76	67	60	54	58	53	48		50	46	42		43
4	74	63	54	48	69	59	51	45	52	45	41		45	40	36		38
5	68	56	47	41	63	52	45	39	46	40	35		40	35	31		34
6	63	50	41	35	58	47	39	34	41	35	30		36	31	27		31
7	58	45	37	31	54	43	35	29	38	31	27		33	28	24		28
8	54	41	33	27	50	39	31	26	34	28	24		30	25	21		26
9	50	37	30	24	47	35	28	23	31	25	21		28	23	19		24
10	47	34	27	22	44	32	26	21	29	23	19		26	21	17		22

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	1.9
10°-20°	259.1	5.4
20°-30°	387.5	8.0
30°-40°	462.6	9.6
40°-50°	484.0	10.0
50°-60°	454.2	9.4
60°-70°	379.4	7.9
70°-80°	271.3	5.6
80°-90°	162.6	3.4
90°-100°	138.6	2.9
100°-110°	187.2	3.9
110°-120°	241.5	5.0
120°-130°	280.7	5.8
130°-140°	296.3	6.1
140°-150°	281.4	5.8
150°-160°	234.7	4.9
160°-170°	156.2	3.2
170°-180°	54.7	1.1
0°-30°	737.5	15.3
0°-40°	1200.1	24.9
0°-60°	2138.3	44.3
0°-90°	2951.6	61.2
90°-120°	567.4	11.8
90°-150°	1425.7	29.6
90°-180°	1871.0	38.8
0°-180°	4822.9	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	70	129	166	178	12
95°	38	82	137	171	182	38
105°	110	136	186	215	225	118
115°	198	212	249	274	282	196
125°	286	287	316	336	342	255
135°	369	370	381	398	402	284
145°	446	446	447	455	457	278
155°	509	509	510	511	508	234
165°	554	553	553	556	553	156
175°	577	575	575	578	574	55
180°	578	578	578	578	578	

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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	128.8	166.1	177.5
92.5°	26.1	73.7	128.7	164.4	172.9
95°	38.3	82.2	136.9	171.1	181.5
97.5°	54.4	94.3	146.1	179.7	189.7
100°	71.2	107.3	157.6	189.2	200.5
102.5°	90.5	121.2	171.2	201.9	211.8
105°	110.5	136.5	185.5	214.7	225.0
107.5°	133.1	155.4	200.1	229.6	238.6
110°	153.9	173.5	216.2	245.1	252.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.6	191.6	231.2	259.6	269.0
115°	198.2	212.1	248.8	274.3	282.2
117.5°	221.4	230.2	264.8	289.8	296.8
120°	241.7	249.6	281.8	305.3	311.7
122.5°	264.0	267.9	299.3	320.9	326.8
125°	285.6	286.9	316.3	336.4	341.9
127.5°	306.4	308.2	333.4	351.5	357.0
130°	327.3	330.0	349.5	367.5	370.6
132.5°	347.2	350.9	365.6	382.1	387.1
135°	368.6	370.2	381.2	398.2	402.5
137.5°	388.1	389.3	397.9	412.4	416.3
140°	407.4	409.7	413.4	428.5	430.5
142.5°	426.1	427.3	428.2	441.4	444.3
145°	445.6	445.5	446.8	454.7	457.1
147.5°	461.4	463.2	464.6	467.7	469.1
150°	479.1	480.0	480.9	480.9	480.3
152.5°	493.6	495.0	495.4	496.3	494.1
155°	509.1	509.1	509.5	511.3	508.2
157.5°	522.2	521.8	522.2	524.0	521.3
160°	534.5	533.6	533.6	535.9	534.0
162.5°	545.4	544.0	544.5	546.8	543.6
165°	554.5	553.1	553.1	555.8	552.7
167.5°	562.2	560.4	560.8	563.6	560.8
170°	568.6	566.7	566.7	569.9	566.7
172.5°	573.5	571.7	571.7	574.5	571.3
175°	576.7	574.9	574.9	577.6	574.5
177.5°	578.5	576.7	576.7	579.5	576.3
180°	578.1	578.1	578.1	578.1	578.1

(END OF REPORT)