

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: P1031952

Luminaire Tested: S123DIW-B775D460UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031952
REPORT IS A COMBINATION OF REPORTS P992100 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D460UB50-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

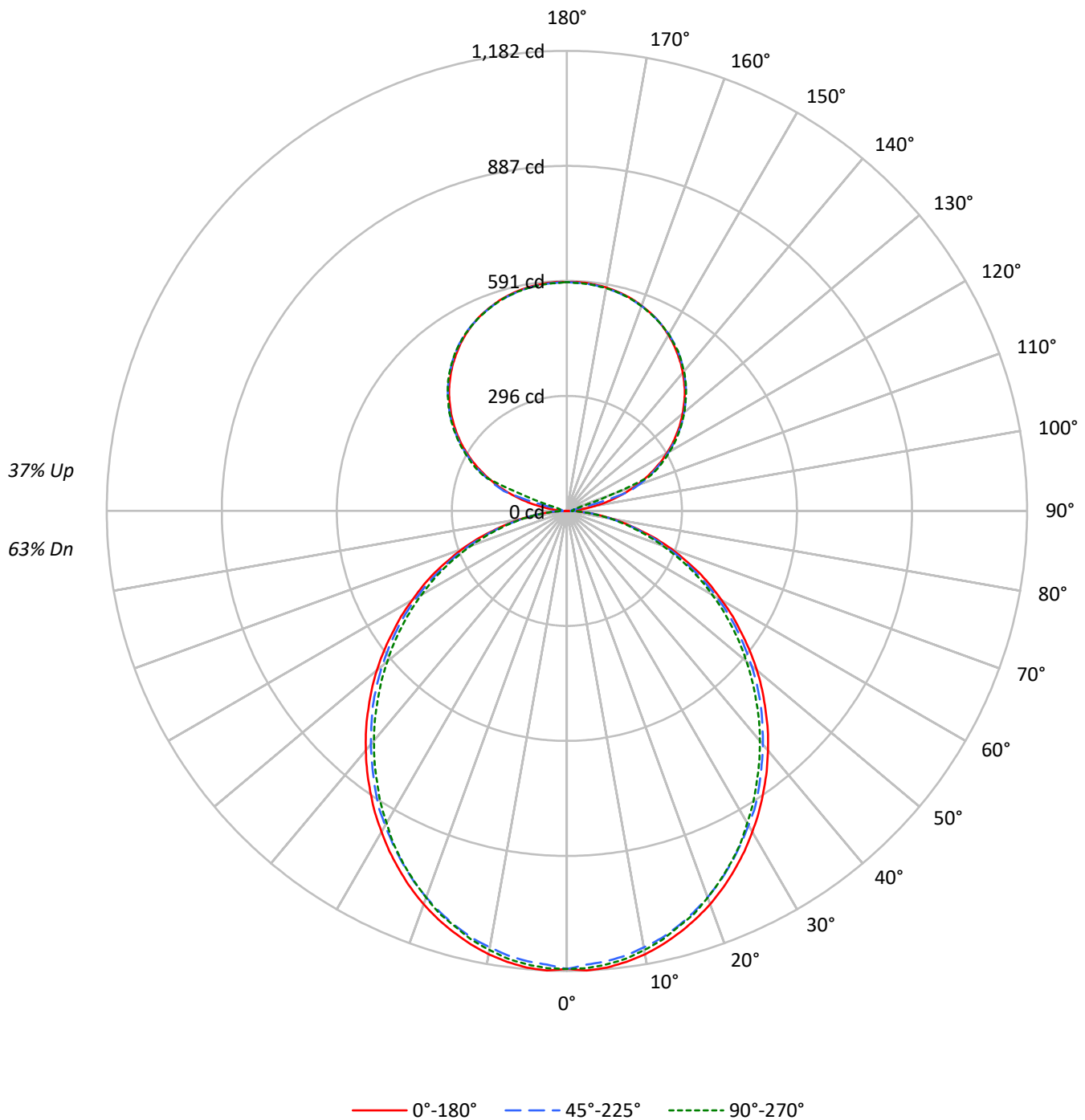
Lumens per Lamp: N/A
Luminaire Lumens: 4856.0 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	30	10
RCR																	
0	110	110	110	110	103	103	103	103	91	91	91	79	79	79	68	68	68
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	59	57
2	92	84	78	72	86	79	73	69	70	65	62	61	58	55	53	50	48
3	84	74	66	60	78	70	63	57	61	56	52	54	50	46	47	44	41
4	77	65	57	51	71	62	54	49	55	49	44	48	43	40	42	38	35
5	70	58	50	44	66	55	48	42	49	43	38	43	38	34	38	34	31
6	65	52	44	38	61	50	42	36	44	38	33	39	34	30	34	30	27
7	60	47	39	33	56	45	37	32	40	34	29	36	31	27	31	27	24
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22
9	52	39	32	27	49	37	30	26	34	28	24	30	25	22	27	23	20
10	49	36	29	24	46	34	28	23	31	25	21	28	23	20	25	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12668	12668	12668
5°	12699	12231	12212
10°	12587	11818	11695
15°	12412	11387	11133
20°	12211	10909	10574
25°	11951	10404	9978
30°	11668	9882	9350
35°	11370	9349	8726
40°	11058	8790	8112
45°	10715	8244	7471
50°	10367	7636	6828
55°	9920	7003	6176
60°	9459	6305	5482
65°	9026	5548	4759
70°	8405	4710	3915
75°	7505	3730	3040
80°	6482	2622	2149
85°	5052	1409	1077

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10715 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	2.3
10°-20°	313.3	6.5
20°-30°	462.7	9.5
30°-40°	540.4	11.1
40°-50°	543.3	11.2
50°-60°	477.2	9.8
60°-70°	355.4	7.3
70°-80°	202.3	4.2
80°-90°	58.7	1.2
90°-100°	20.7	0.4
100°-110°	100.2	2.1
110°-120°	245.6	5.1
120°-130°	311.7	6.4
130°-140°	333.0	6.9
140°-150°	311.4	6.4
150°-160°	251.2	5.2
160°-170°	162.1	3.3
170°-180°	55.9	1.2
0°-30°	886.9	18.3
0°-40°	1427.3	29.4
0°-60°	2447.8	50.4
0°-90°	3064.2	63.1
90°-120°	366.5	7.5
90°-150°	1322.6	27.2
90°-180°	1792.0	36.9
0°-180°	4856.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1178	1173	1162	1172	1170	112
15°	1121	1117	1104	1112	1106	316
25°	1018	1012	999	1000	997	469
35°	880	874	861	855	850	551
45°	722	718	704	692	687	557
55°	548	546	533	522	517	490
65°	373	368	358	350	347	368
75°	197	193	190	185	182	211
85°	53	51	51	49	49	56
90°	0	5	10	12	13	5
95°	27	9	14	17	17	32
105°	130	135	96	18	19	138
115°	244	247	251	255	257	241
125°	344	348	349	350	351	307
135°	428	431	433	434	433	330
145°	494	497	498	499	499	309
155°	544	544	544	546	544	251
165°	574	573	572	576	573	162
175°	588	586	586	589	586	56
180°	588	588	588	588	588	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1176.9	1176.9	1176.9	1176.9	1176.9
2.5°	1182.0	1177.9	1166.8	1176.9	1175.9
5°	1177.9	1172.9	1161.7	1171.9	1169.8
7.5°	1168.8	1163.8	1152.6	1161.7	1160.7
10°	1156.7	1151.6	1138.5	1147.6	1145.5
12.5°	1140.5	1136.4	1124.3	1130.4	1129.4
15°	1121.3	1117.2	1104.1	1112.2	1106.1
17.5°	1100.0	1095.0	1081.8	1087.9	1085.8
20°	1075.7	1069.7	1056.5	1060.5	1057.5
22.5°	1048.4	1042.3	1029.2	1032.2	1028.2
25°	1018.0	1012.0	998.8	999.8	996.8
27.5°	986.7	980.6	966.4	967.4	964.4
30°	952.3	947.2	933.0	933.0	926.0
32.5°	917.9	910.8	900.7	893.6	890.5
35°	880.4	874.3	861.2	855.1	850.1
37.5°	843.0	834.9	821.7	814.6	811.6
40°	803.5	797.4	783.3	775.2	771.1
42.5°	764.0	757.0	742.8	734.7	730.6
45°	721.5	717.5	704.3	692.2	687.1
47.5°	680.0	674.0	661.8	649.7	645.6
50°	637.5	632.5	619.3	608.2	602.1
52.5°	593.0	590.0	575.8	566.7	560.6
55°	547.5	546.5	533.3	522.2	517.1
57.5°	505.0	500.9	490.8	480.7	474.6
60°	458.4	457.4	445.3	436.2	431.1
62.5°	416.9	413.9	401.8	392.6	389.6
65°	373.4	368.4	358.2	350.1	347.1
67.5°	326.9	322.8	314.7	307.6	303.6
70°	285.4	279.3	273.2	266.1	261.1
72.5°	241.9	237.8	230.7	224.7	222.6
75°	197.3	193.3	190.3	185.2	182.2
77.5°	157.9	155.8	151.8	147.7	147.7
80°	119.4	116.4	114.4	113.3	113.3
82.5°	82.0	82.0	82.0	79.9	78.9
85°	52.6	50.6	50.6	48.6	48.6
87.5°	26.3	23.3	22.3	21.3	21.3
90°	0.4	4.8	10.5	12.2	13.1
92.5°	10.0	7.4	11.4	14.4	14.8
95°	26.6	8.7	13.5	16.6	16.6
97.5°	48.5	36.2	14.0	17.5	17.9
100°	73.8	82.5	14.4	17.9	18.3
102.5°	102.6	108.3	32.3	17.9	18.8
105°	130.1	134.9	95.6	18.3	19.2
107.5°	159.4	163.3	169.9	102.6	45.4
110°	188.6	192.1	196.9	182.5	120.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	216.6	219.6	224.4	228.4	227.5
115°	244.1	246.7	250.6	255.0	256.8
117.5°	271.2	274.2	276.4	279.9	280.3
120°	296.1	300.0	301.3	304.8	304.8
122.5°	321.4	324.4	326.2	328.4	328.8
125°	344.1	347.6	349.3	350.2	351.1
127.5°	366.8	370.3	372.5	373.8	372.9
130°	387.8	391.3	393.0	394.7	393.9
132.5°	407.8	411.3	412.7	414.4	413.1
135°	428.4	431.0	432.7	434.0	432.7
137.5°	445.8	449.3	450.2	452.4	451.5
140°	463.3	465.9	467.2	469.0	468.1
142.5°	479.5	482.1	483.4	484.7	483.4
145°	494.3	497.4	498.2	499.1	499.1
147.5°	508.7	510.9	511.8	512.6	510.5
150°	521.8	523.1	524.0	524.9	523.6
152.5°	533.6	534.0	534.5	536.2	534.0
155°	544.5	543.7	544.1	546.3	543.7
157.5°	553.3	553.3	552.8	555.4	551.9
160°	561.1	560.7	560.2	562.9	559.8
162.5°	568.5	567.2	566.8	569.9	567.2
165°	574.2	572.9	572.5	576.0	572.9
167.5°	579.0	577.3	577.3	580.8	577.3
170°	583.0	581.2	581.2	584.7	581.2
172.5°	585.6	583.4	583.8	587.3	583.4
175°	587.8	585.6	586.0	589.1	585.6
177.5°	588.6	586.4	586.9	590.4	586.0
180°	587.8	587.8	587.8	587.8	587.8

(END OF REPORT)