

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: P1032426

Luminaire Tested: S123RDIW-B775D460UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032426
REPORT IS A COMBINATION OF REPORTS P994734 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B775D460UB27-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

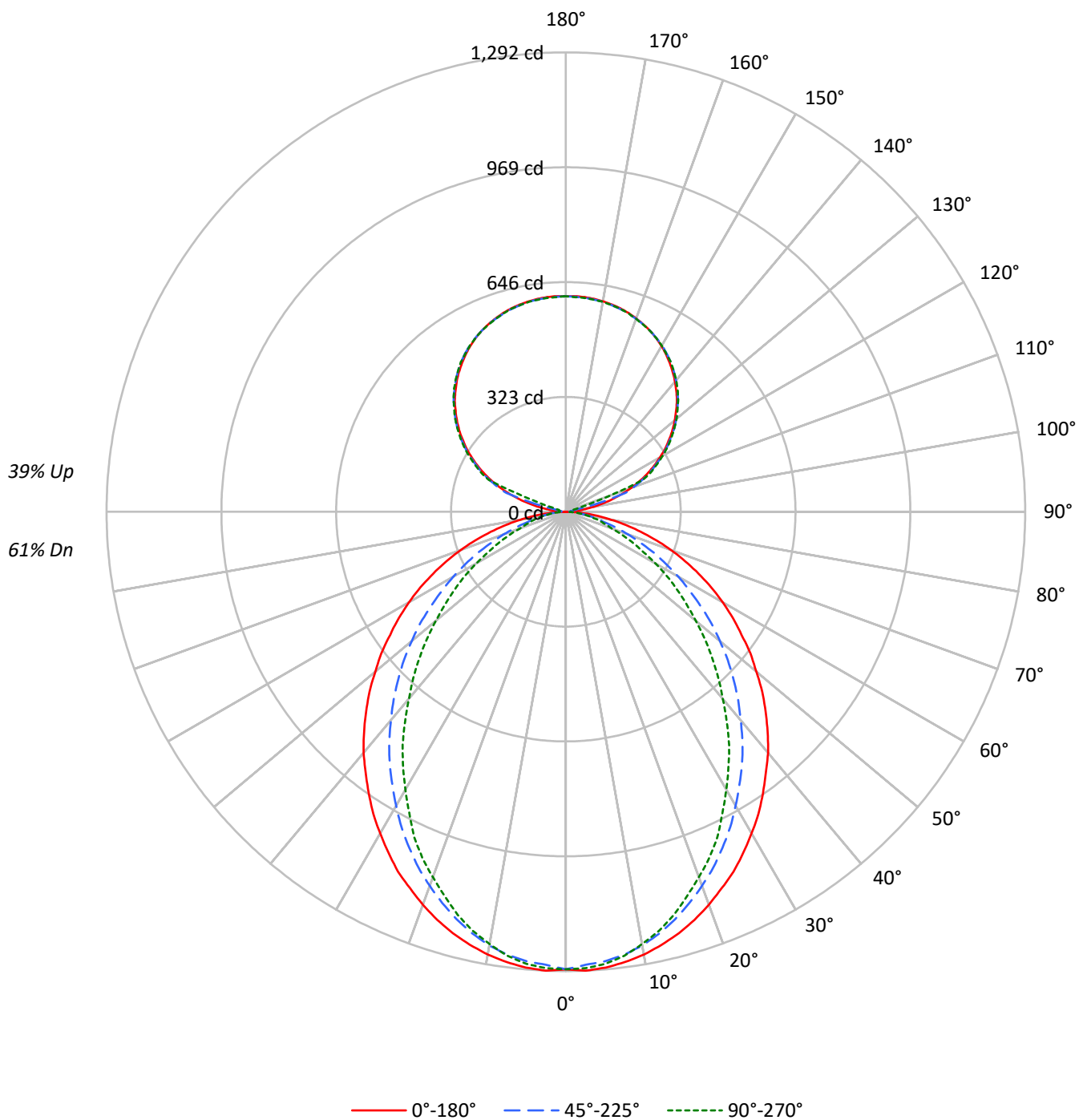
Lumens per Lamp: N/A
Luminaire Lumens: 4756.0 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	90	90	90	77	77	77	66	66	66
1	101	96	93	89	94	90	87	84	79	77	74	69	67	65	59	58	57
2	92	85	79	74	86	80	74	70	70	66	62	61	58	55	53	50	49
3	84	75	68	62	79	70	64	59	62	57	53	54	50	47	47	44	42
4	77	67	59	53	72	63	56	50	55	50	45	49	44	41	42	39	36
5	71	59	51	45	66	56	49	43	50	44	39	44	39	36	38	35	32
6	66	54	45	40	61	51	43	38	45	39	35	40	35	31	35	31	28
7	61	49	41	35	57	46	39	34	41	35	31	36	32	28	32	28	25
8	57	44	36	31	53	42	35	30	37	32	27	33	29	25	29	26	23
9	53	41	33	28	49	38	32	27	34	29	25	31	26	23	27	23	21
10	49	37	30	25	46	35	29	24	32	26	22	28	24	21	25	22	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13851	13851	13851
5°	13874	13360	13324
10°	13764	12858	12605
15°	13586	12238	11816
20°	13350	11562	10936
25°	13109	10861	10102
30°	12799	10114	9115
35°	12480	9381	8216
40°	12180	8585	7224
45°	11795	7806	6331
50°	11370	6974	5408
55°	10930	6085	4562
60°	10509	5172	3703
65°	9964	4234	2890
70°	9282	3203	2066
75°	8296	2168	1637
80°	7079	1506	1147
85°	5312	813	601

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11795 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.0	2.5
10°-20°	336.5	7.1
20°-30°	484.5	10.2
30°-40°	545.6	11.5
40°-50°	521.9	11.0
50°-60°	427.2	9.0
60°-70°	288.0	6.1
70°-80°	144.5	3.0
80°-90°	39.0	0.8
90°-100°	21.4	0.4
100°-110°	103.3	2.2
110°-120°	253.2	5.3
120°-130°	321.5	6.8
130°-140°	343.4	7.2
140°-150°	321.1	6.8
150°-160°	259.0	5.4
160°-170°	167.2	3.5
170°-180°	57.6	1.2
0°-30°	942.0	19.8
0°-40°	1487.6	31.3
0°-60°	2436.7	51.2
0°-90°	2908.2	61.1
90°-120°	378.0	7.9
90°-150°	1364.0	28.7
90°-180°	1848.0	38.9
0°-180°	4756.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1287	1287	1287	1287	1287	
5°	1287	1282	1269	1278	1276	122
15°	1227	1216	1187	1181	1174	346
25°	1117	1091	1043	1021	1009	514
35°	966	929	864	819	800	605
45°	794	747	667	607	582	613
55°	603	552	463	403	382	541
65°	412	355	273	222	211	408
75°	218	168	111	100	98	232
85°	55	32	29	27	27	61
90°	0	5	11	13	14	5
95°	28	9	14	17	17	33
105°	134	139	99	19	20	142
115°	252	254	258	263	265	249
125°	355	358	360	361	362	317
135°	442	444	446	448	446	340
145°	510	513	514	515	515	319
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°	1286.8	1286.8	1286.8	1286.8	1286.8
2.5°	1292.0	1287.8	1275.3	1286.8	1284.7
5°	1286.8	1281.5	1269.0	1278.4	1276.3
7.5°	1277.4	1272.1	1256.5	1262.7	1259.6
10°	1264.8	1257.5	1238.7	1239.8	1234.6
12.5°	1247.1	1238.7	1214.7	1213.7	1207.4
15°	1227.3	1215.8	1186.6	1181.3	1174.0
17.5°	1203.3	1190.7	1154.2	1143.8	1133.3
20°	1176.1	1159.4	1119.8	1106.2	1093.7
22.5°	1145.9	1126.0	1083.3	1065.5	1054.0
25°	1116.6	1090.6	1042.6	1020.6	1009.2
27.5°	1081.2	1053.0	1000.8	971.6	953.8
30°	1044.6	1013.3	954.9	919.4	902.7
32.5°	1008.1	971.6	909.0	869.3	851.6
35°	966.4	928.8	864.1	819.2	800.4
37.5°	924.6	883.9	816.1	766.0	743.0
40°	885.0	839.0	765.0	710.7	686.7
42.5°	840.1	794.2	716.9	656.4	635.5
45°	794.2	747.2	666.9	607.4	582.3
47.5°	749.3	697.1	617.8	553.1	531.2
50°	699.2	650.2	565.6	500.9	476.9
52.5°	654.3	600.1	516.6	448.7	427.9
55°	603.2	552.1	463.4	402.8	382.0
57.5°	557.3	502.0	412.2	354.8	337.1
60°	509.3	451.9	365.3	308.9	291.2
62.5°	461.3	403.9	317.3	265.1	246.3
65°	412.2	354.8	273.4	222.3	210.8
67.5°	363.2	304.7	225.4	186.8	174.3
70°	315.2	258.8	185.8	149.2	137.8
72.5°	267.2	211.8	147.1	119.0	115.8
75°	218.1	168.0	110.6	100.2	98.1
77.5°	173.2	127.3	86.6	80.4	78.3
80°	130.4	87.7	65.7	62.6	60.5
82.5°	89.7	54.3	47.0	43.8	43.8
85°	55.3	32.4	29.2	27.1	27.1
87.5°	25.0	13.6	13.6	12.5	11.5
90°	0.5	5.0	10.8	12.6	13.5
92.5°	10.4	7.7	11.7	14.9	15.3
95°	27.5	9.0	14.0	17.1	17.1
97.5°	50.0	37.4	14.4	18.0	18.5
100°	76.1	85.1	14.9	18.5	18.9
102.5°	105.8	111.7	33.3	18.5	19.4
105°	134.2	139.1	98.6	18.9	19.8
107.5°	164.4	168.4	175.2	105.8	46.8
110°	194.5	198.1	203.1	188.2	123.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	223.4	226.5	231.5	235.5	234.6
115°	251.7	254.4	258.5	263.0	264.8
117.5°	279.6	282.8	285.0	288.6	289.1
120°	305.3	309.4	310.7	314.3	314.3
122.5°	331.4	334.6	336.4	338.6	339.1
125°	354.8	358.4	360.2	361.1	362.0
127.5°	378.3	381.9	384.1	385.5	384.6
130°	399.9	403.5	405.3	407.1	406.2
132.5°	420.6	424.2	425.5	427.3	426.0
135°	441.8	444.5	446.3	447.6	446.3
137.5°	459.8	463.4	464.3	466.5	465.6
140°	477.8	480.5	481.8	483.6	482.7
142.5°	494.4	497.1	498.5	499.8	498.5
145°	509.7	512.9	513.8	514.7	514.7
147.5°	524.6	526.9	527.8	528.7	526.4
150°	538.1	539.5	540.4	541.3	539.9
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)