

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: P1032427

Luminaire Tested: S123RDIW-B775D460UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032427
REPORT IS A COMBINATION OF REPORTS P994735 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-F1
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

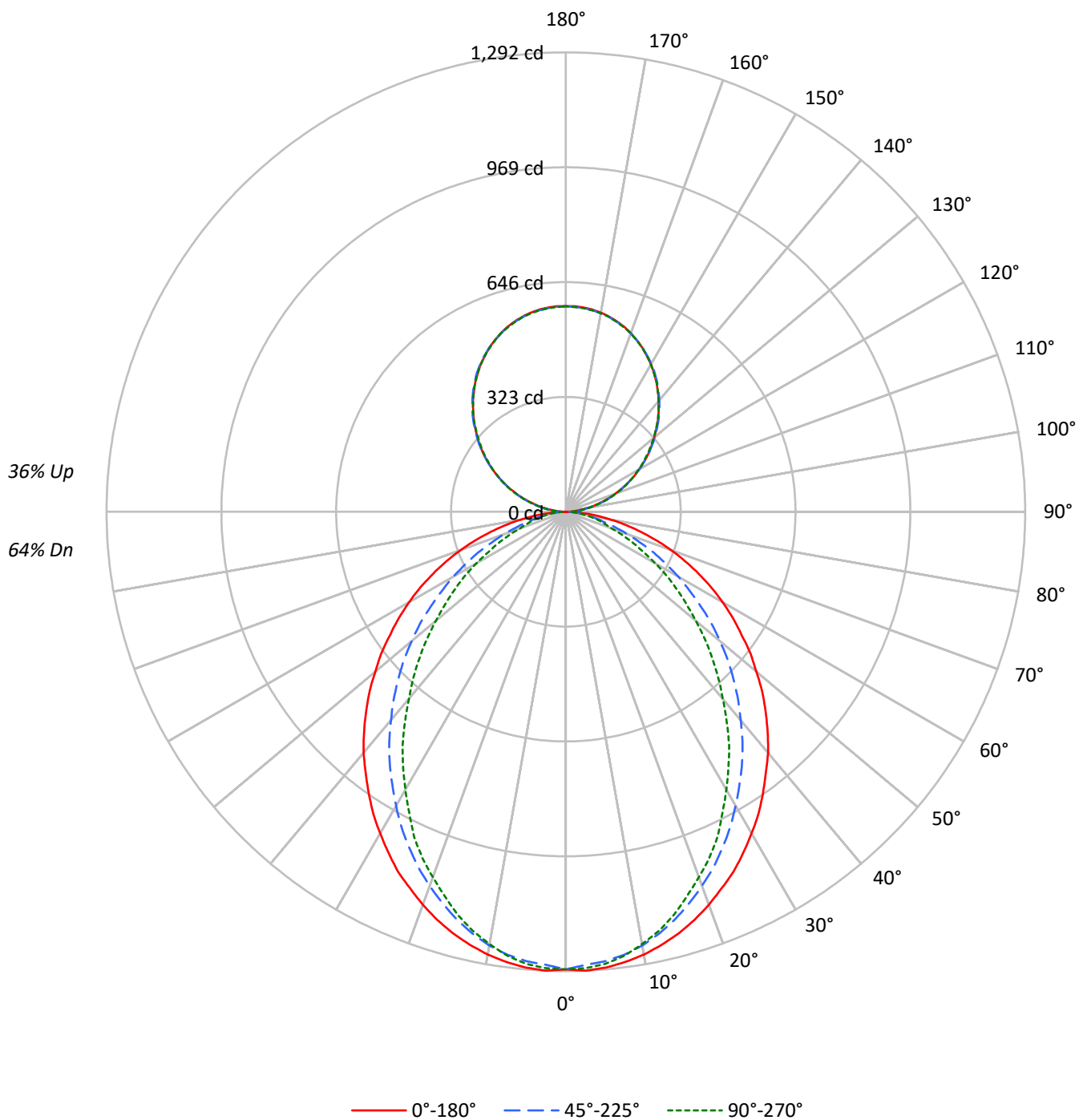
Lumens per Lamp: N/A
Luminaire Lumens: 4510.0 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69
1	101	97	93	90	95	92	88	85	81	78	76	71	69	68	62	61	60
2	93	85	79	74	87	81	75	71	71	67	64	63	60	57	55	53	51
3	85	75	68	62	80	71	65	60	63	58	54	56	52	49	49	46	44
4	78	67	59	53	73	63	56	51	57	51	46	50	46	42	44	41	38
5	72	60	52	46	67	57	50	44	51	45	40	45	41	37	40	36	33
6	66	54	46	40	62	51	44	39	46	40	36	41	36	33	36	33	30
7	61	49	41	35	58	47	39	34	42	36	32	38	33	29	33	29	26
8	57	45	37	32	54	43	35	30	38	32	28	34	30	26	31	27	24
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	28	25	22
10	50	38	30	26	47	36	29	25	33	27	23	29	25	21	26	23	20

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	2.7
10°-20°	336.5	7.5
20°-30°	484.5	10.7
30°-40°	545.6	12.1
40°-50°	521.9	11.6
50°-60°	427.2	9.5
60°-70°	288.0	6.4
70°-80°	144.5	3.2
80°-90°	39.0	0.9
90°-100°	37.2	0.8
100°-110°	112.6	2.5
110°-120°	191.7	4.3
120°-130°	252.3	5.6
130°-140°	283.5	6.3
140°-150°	278.8	6.2
150°-160°	234.7	5.2
160°-170°	156.2	3.5
170°-180°	54.7	1.2
0°-30°	942.0	20.9
0°-40°	1487.6	33.0
0°-60°	2436.7	54.0
0°-90°	2908.2	64.5
90°-120°	341.6	7.6
90°-150°	1156.2	25.6
90°-180°	1602.0	35.5
0°-180°	4510.0	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°	27	30	34	35	35	30
105°	102	103	107	107	108	109
115°	193	194	194	194	194	191
125°	282	284	283	281	279	252
135°	366	369	369	367	366	282
145°	445	446	447	446	445	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°	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	10.9	12.7	13.6
92.5°	13.6	16.3	19.1	20.4	19.5
95°	26.8	30.0	33.6	35.4	35.4
97.5°	44.0	46.3	49.0	51.3	50.9
100°	61.8	64.5	66.8	68.1	69.0
102.5°	82.2	83.6	86.7	88.1	87.6
105°	102.2	103.1	107.2	107.2	108.1
107.5°	125.8	126.2	128.1	129.4	129.0
110°	147.6	148.5	149.4	151.2	150.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	170.7	170.7	173.0	173.0
115°	193.0	194.4	193.5	193.9	193.5
117.5°	216.2	216.6	215.7	215.7	214.3
120°	237.5	240.2	238.0	237.5	236.6
122.5°	259.8	261.6	260.7	259.3	257.9
125°	282.5	283.8	282.9	281.1	279.3
127.5°	303.3	306.1	305.2	302.4	300.6
130°	324.2	327.9	326.5	324.7	321.5
132.5°	345.1	348.8	347.9	345.6	343.3
135°	366.5	369.2	368.7	366.9	366.0
137.5°	386.0	388.3	389.6	387.4	386.0
140°	406.4	408.7	409.2	408.7	405.5
142.5°	425.1	427.3	428.2	427.8	425.5
145°	444.6	445.5	446.8	446.4	444.6
147.5°	461.4	463.2	464.6	464.6	461.8
150°	479.1	480.0	480.9	480.9	478.2
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)