

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: P1031251

Luminaire Tested: S123RDIW-B775D460UB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031251
REPORT IS A COMBINATION OF REPORTS P994747 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B775D460UB2750-4F0-XX-W2A-F_3000K
Description: Define 3 Regressed Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

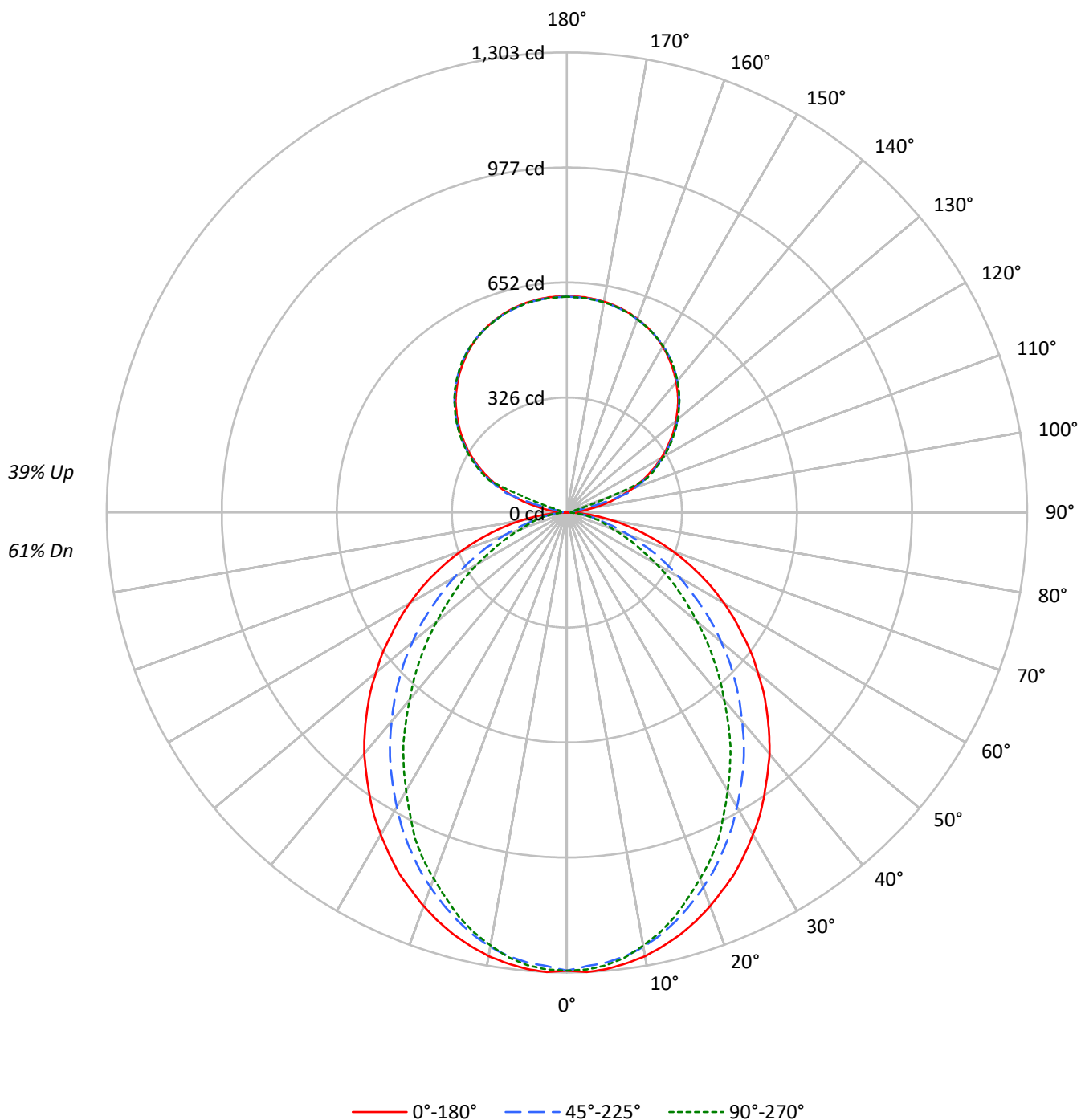
Lumens per Lamp: N/A
Luminaire Lumens: 4797.0 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	50	30	10
RCR																				
0	110	110	110	110	103	103	103	103	90	90	90	77	77	77	66	66	66	66	66	66
1	101	96	93	89	94	90	87	84	79	77	74	69	67	65	59	58	57	57	57	52
2	92	85	79	74	86	80	74	70	70	66	62	61	58	55	53	50	49	49	49	44
3	84	75	68	62	79	70	64	59	62	57	53	54	50	47	47	44	42	42	42	38
4	77	67	59	53	72	63	56	50	55	50	45	49	44	41	42	39	36	36	36	33
5	71	59	51	45	66	56	49	43	50	44	39	44	39	36	38	35	32	32	32	29
6	66	54	45	40	61	51	43	38	45	39	35	40	35	31	35	31	28	28	28	26
7	61	49	41	35	57	46	39	34	41	35	31	36	32	28	32	28	25	25	25	23
8	57	44	36	31	53	42	35	30	37	32	27	33	29	25	29	26	23	23	23	20
9	53	41	33	28	49	38	32	27	34	29	25	31	26	23	27	23	21	21	21	19
10	49	37	30	25	46	35	29	24	32	26	22	28	24	21	25	22	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13969	13969	13969
5°	13992	13475	13439
10°	13882	12969	12713
15°	13702	12343	11918
20°	13465	11661	11030
25°	13221	10953	10188
30°	12909	10201	9194
35°	12588	9461	8287
40°	12284	8657	7286
45°	11896	7873	6386
50°	11467	7034	5455
55°	11024	6136	4601
60°	10600	5216	3735
65°	10051	4272	2915
70°	9362	3230	2083
75°	8369	2188	1650
80°	7145	1520	1157
85°	5360	821	607

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11896 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.0	2.5
10°-20°	339.4	7.1
20°-30°	488.7	10.2
30°-40°	550.3	11.5
40°-50°	526.4	11.0
50°-60°	430.9	9.0
60°-70°	290.5	6.1
70°-80°	145.7	3.0
80°-90°	39.3	0.8
90°-100°	21.6	0.4
100°-110°	104.2	2.2
110°-120°	255.4	5.3
120°-130°	324.3	6.8
130°-140°	346.4	7.2
140°-150°	323.9	6.8
150°-160°	261.3	5.4
160°-170°	168.6	3.5
170°-180°	58.1	1.2
0°-30°	950.1	19.8
0°-40°	1500.4	31.3
0°-60°	2457.7	51.2
0°-90°	2933.2	61.1
90°-120°	381.2	7.9
90°-150°	1375.8	28.7
90°-180°	1864.0	38.9
0°-180°	4797.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1298	1293	1280	1289	1287	123
15°	1238	1226	1197	1192	1184	349
25°	1126	1100	1052	1029	1018	518
35°	975	937	872	826	807	610
45°	801	754	673	613	587	618
55°	608	557	467	406	385	546
65°	416	358	276	224	213	411
75°	220	170	112	101	99	234
85°	56	33	30	27	27	61
90°	0	5	11	13	14	5
95°	28	9	14	17	17	33
105°	135	140	100	19	20	144
115°	254	257	261	265	267	251
125°	358	362	363	364	365	320
135°	446	448	450	452	450	343
145°	514	517	518	519	519	322
155°	566	566	566	568	566	261
165°	597	596	596	599	596	169
175°	611	609	610	613	609	58
180°	611	611	611	611	611	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1297.8	1297.8	1297.8	1297.8	1297.8
2.5°	1303.1	1298.9	1286.2	1297.8	1295.7
5°	1297.8	1292.6	1279.9	1289.4	1287.3
7.5°	1288.3	1283.1	1267.3	1273.6	1270.5
10°	1275.7	1268.3	1249.4	1250.5	1245.2
12.5°	1257.8	1249.4	1225.2	1224.1	1217.8
15°	1237.8	1226.2	1196.8	1191.5	1184.1
17.5°	1213.6	1201.0	1164.1	1153.6	1143.1
20°	1186.2	1169.4	1129.4	1115.7	1103.1
22.5°	1155.7	1135.7	1092.6	1074.7	1063.1
25°	1126.2	1099.9	1051.5	1029.4	1017.8
27.5°	1090.5	1062.0	1009.4	979.9	962.0
30°	1053.6	1022.0	963.1	927.3	910.5
32.5°	1016.8	979.9	916.8	876.8	858.9
35°	974.7	936.8	871.5	826.3	807.3
37.5°	932.6	891.5	823.1	772.6	749.4
40°	892.6	846.3	771.5	716.8	692.6
42.5°	847.3	801.0	723.1	662.1	641.0
45°	801.0	753.6	672.6	612.6	587.3
47.5°	755.7	703.1	623.1	557.9	535.8
50°	705.2	655.8	570.5	505.2	481.0
52.5°	660.0	605.2	521.0	452.6	431.6
55°	608.4	556.8	467.3	406.3	385.2
57.5°	562.1	506.3	415.8	357.9	340.0
60°	513.7	455.8	368.4	311.6	293.7
62.5°	465.2	407.3	320.0	267.4	248.4
65°	415.8	357.9	275.8	224.2	212.6
67.5°	366.3	307.4	227.4	188.4	175.8
70°	317.9	261.0	187.4	150.5	138.9
72.5°	269.5	213.7	148.4	120.0	116.8
75°	220.0	169.5	111.6	101.0	98.9
77.5°	174.7	128.4	87.4	81.0	78.9
80°	131.6	88.4	66.3	63.2	61.0
82.5°	90.5	54.7	47.4	44.2	44.2
85°	55.8	32.6	29.5	27.4	27.4
87.5°	25.3	13.7	13.7	12.6	11.6
90°	0.5	5.0	10.9	12.7	13.6
92.5°	10.4	7.7	11.8	15.0	15.4
95°	27.7	9.1	14.1	17.3	17.3
97.5°	50.4	37.7	14.5	18.2	18.6
100°	76.8	85.8	15.0	18.6	19.1
102.5°	106.7	112.6	33.6	18.6	19.5
105°	135.4	140.3	99.5	19.1	20.0
107.5°	165.8	169.9	176.7	106.7	47.2
110°	196.2	199.8	204.8	189.9	124.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.3	228.5	233.5	237.5	236.6
115°	253.9	256.6	260.7	265.3	267.1
117.5°	282.1	285.2	287.5	291.1	291.6
120°	308.0	312.0	313.4	317.0	317.0
122.5°	334.3	337.5	339.3	341.6	342.0
125°	357.9	361.5	363.4	364.3	365.2
127.5°	381.5	385.2	387.4	388.8	387.9
130°	403.3	407.0	408.8	410.6	409.7
132.5°	424.2	427.9	429.2	431.0	429.7
135°	445.6	448.3	450.1	451.5	450.1
137.5°	463.7	467.4	468.3	470.6	469.6
140°	481.9	484.6	486.0	487.8	486.9
142.5°	498.7	501.4	502.8	504.2	502.8
145°	514.2	517.3	518.2	519.2	519.2
147.5°	529.1	531.4	532.3	533.2	531.0
150°	542.8	544.1	545.0	546.0	544.6
152.5°	555.0	555.5	555.9	557.8	555.5
155°	566.4	565.5	565.9	568.2	565.5
157.5°	575.5	575.5	575.0	577.7	574.1
160°	583.7	583.2	582.7	585.5	582.3
162.5°	591.4	590.0	589.6	592.7	590.0
165°	597.3	595.9	595.5	599.1	595.9
167.5°	602.3	600.5	600.5	604.1	600.5
170°	606.4	604.5	604.5	608.2	604.5
172.5°	609.1	606.8	607.3	610.9	606.8
175°	611.4	609.1	609.5	612.7	609.1
177.5°	612.3	610.0	610.5	614.1	609.5
180°	611.4	611.4	611.4	611.4	611.4

(END OF REPORT)