

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: P1032443

Luminaire Tested: S123RDIW-B775D460UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032443
REPORT IS A COMBINATION OF REPORTS P994773 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B775D460UB50-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

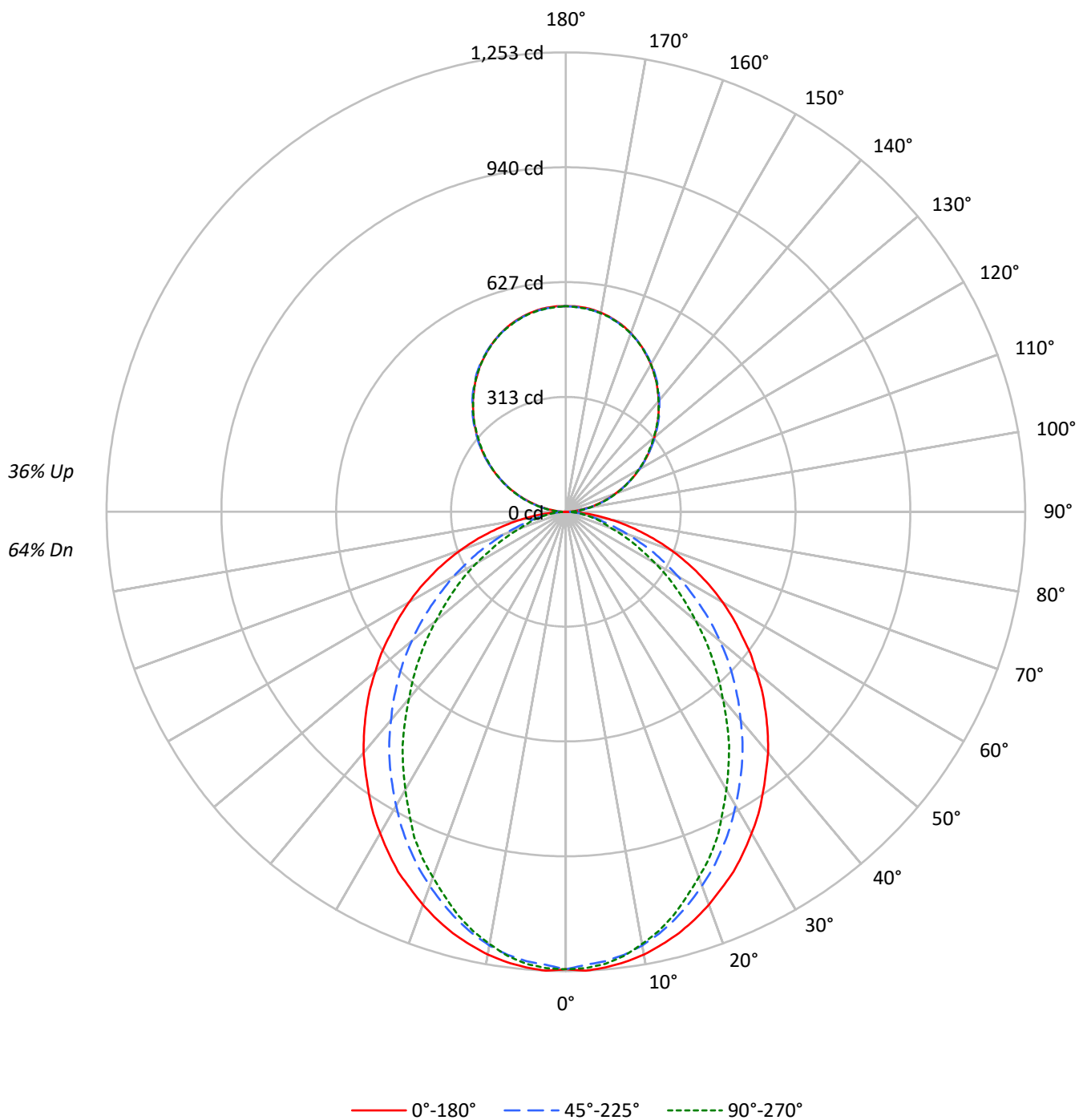
Lumens per Lamp: N/A
Luminaire Lumens: 4374.0 lumens
Efficiency: N/A
Efficacy: 89.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	32	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°	13431	13431	13431
5°	13453	12956	12921
10°	13347	12468	12223
15°	13174	11866	11459
20°	12946	11212	10605
25°	12712	10531	9795
30°	12412	9808	8839
35°	12102	9096	7968
40°	11811	8324	7005
45°	11437	7570	6140
50°	11025	6763	5245
55°	10598	5900	4424
60°	10191	5015	3590
65°	9662	4106	2802
70°	9000	3105	2003
75°	8045	2103	1587
80°	6868	1462	1113
85°	5149	788	583

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11437 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.3	2.7
10°-20°	326.3	7.5
20°-30°	469.8	10.7
30°-40°	529.1	12.1
40°-50°	506.1	11.6
50°-60°	414.3	9.5
60°-70°	279.3	6.4
70°-80°	140.1	3.2
80°-90°	37.8	0.9
90°-100°	36.1	0.8
100°-110°	109.3	2.5
110°-120°	186.0	4.3
120°-130°	244.7	5.6
130°-140°	275.0	6.3
140°-150°	270.4	6.2
150°-160°	227.7	5.2
160°-170°	151.6	3.5
170°-180°	53.1	1.2
0°-30°	913.4	20.9
0°-40°	1442.6	33.0
0°-60°	2363.0	54.0
0°-90°	2820.2	64.5
90°-120°	331.4	7.6
90°-150°	1121.5	25.6
90°-180°	1554.0	35.5
0°-180°	4374.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1248	1243	1231	1240	1238	118
15°	1190	1179	1151	1146	1138	335
25°	1083	1058	1011	990	979	498
35°	937	901	838	794	776	587
45°	770	725	647	589	565	594
55°	585	535	449	391	370	525
65°	400	344	265	216	204	396
75°	212	163	107	97	95	225
85°	54	31	28	26	26	59
90°	0	5	11	12	13	5
95°	26	29	33	34	34	29
105°	99	100	104	104	105	106
115°	187	188	188	188	188	185
125°	274	275	274	273	271	244
135°	356	358	358	356	355	274
145°	431	432	434	433	431	269
155°	494	494	494	496	493	227
165°	538	536	536	539	536	152
175°	560	558	558	560	557	53
180°	561	561	561	561	561	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1247.8	1247.8	1247.8	1247.8	1247.8
2.5°	1252.9	1248.8	1236.7	1247.8	1245.8
5°	1247.8	1242.7	1230.6	1239.7	1237.7
7.5°	1238.7	1233.6	1218.5	1224.5	1221.5
10°	1226.5	1219.5	1201.2	1202.3	1197.2
12.5°	1209.3	1201.2	1178.0	1177.0	1170.9
15°	1190.1	1179.0	1150.6	1145.6	1138.5
17.5°	1166.8	1154.7	1119.3	1109.2	1099.0
20°	1140.5	1124.3	1085.9	1072.7	1060.6
22.5°	1111.2	1092.0	1050.5	1033.3	1022.1
25°	1082.8	1057.5	1011.0	989.7	978.6
27.5°	1048.4	1021.1	970.5	942.2	925.0
30°	1013.0	982.7	926.0	891.6	875.4
32.5°	977.6	942.2	881.5	843.0	825.8
35°	937.1	900.7	837.9	794.4	776.2
37.5°	896.6	857.2	791.4	742.8	720.5
40°	858.2	813.7	741.8	689.2	665.9
42.5°	814.7	770.1	695.2	636.5	616.3
45°	770.1	724.6	646.7	589.0	564.7
47.5°	726.6	676.0	599.1	536.4	515.1
50°	678.0	630.5	548.5	485.8	462.5
52.5°	634.5	581.9	500.9	435.2	414.9
55°	584.9	535.3	449.3	390.6	370.4
57.5°	540.4	486.8	399.7	344.1	326.9
60°	493.9	438.2	354.2	299.6	282.3
62.5°	447.3	391.6	307.6	257.0	238.8
65°	399.7	344.1	265.1	215.6	204.4
67.5°	352.2	295.5	218.6	181.1	169.0
70°	305.6	251.0	180.1	144.7	133.6
72.5°	259.1	205.4	142.7	115.4	112.3
75°	211.5	162.9	107.3	97.2	95.1
77.5°	168.0	123.5	84.0	77.9	75.9
80°	126.5	85.0	63.8	60.7	58.7
82.5°	87.0	52.6	45.5	42.5	42.5
85°	53.6	31.4	28.3	26.3	26.3
87.5°	24.3	13.2	13.2	12.1	11.1
90°	0.4	4.8	10.6	12.3	13.2
92.5°	13.2	15.9	18.5	19.8	18.9
95°	26.0	29.1	32.6	34.4	34.4
97.5°	42.7	44.9	47.6	49.8	49.3
100°	59.9	62.6	64.8	66.1	67.0
102.5°	79.7	81.1	84.1	85.5	85.0
105°	99.1	100.0	104.0	104.0	104.8
107.5°	122.0	122.5	124.2	125.5	125.1
110°	143.2	144.0	144.9	146.7	145.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	165.2	165.6	165.6	167.8	167.8
115°	187.2	188.5	187.7	188.1	187.7
117.5°	209.7	210.1	209.2	209.2	207.9
120°	230.4	233.0	230.8	230.4	229.5
122.5°	252.0	253.7	252.9	251.5	250.2
125°	274.0	275.3	274.4	272.7	270.9
127.5°	294.3	296.9	296.0	293.4	291.6
130°	314.5	318.1	316.7	315.0	311.9
132.5°	334.8	338.3	337.4	335.2	333.0
135°	355.5	358.1	357.7	355.9	355.1
137.5°	374.4	376.6	378.0	375.8	374.4
140°	394.3	396.5	396.9	396.5	393.4
142.5°	412.3	414.5	415.4	415.0	412.8
145°	431.3	432.1	433.5	433.0	431.3
147.5°	447.6	449.3	450.6	450.6	448.0
150°	464.7	465.6	466.5	466.5	463.9
152.5°	478.8	480.2	480.6	481.5	479.3
155°	493.8	493.8	494.3	496.0	492.9
157.5°	506.6	506.2	506.6	508.4	505.7
160°	518.5	517.6	517.6	519.8	518.0
162.5°	529.1	527.7	528.2	530.4	527.3
165°	537.9	536.5	536.5	539.2	536.1
167.5°	545.4	543.6	544.0	546.7	544.0
170°	551.5	549.8	549.8	552.8	549.8
172.5°	556.4	554.6	554.6	557.3	554.2
175°	559.5	557.7	557.7	560.3	557.3
177.5°	561.2	559.5	559.5	562.1	559.0
180°	560.8	560.8	560.8	560.8	560.8

(END OF REPORT)