

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: P995008

Luminaire Tested: S123RDR-B775DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P995008
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-B775DB2750-4F0-XX-W2A-F_3500K
Description: Define 3 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

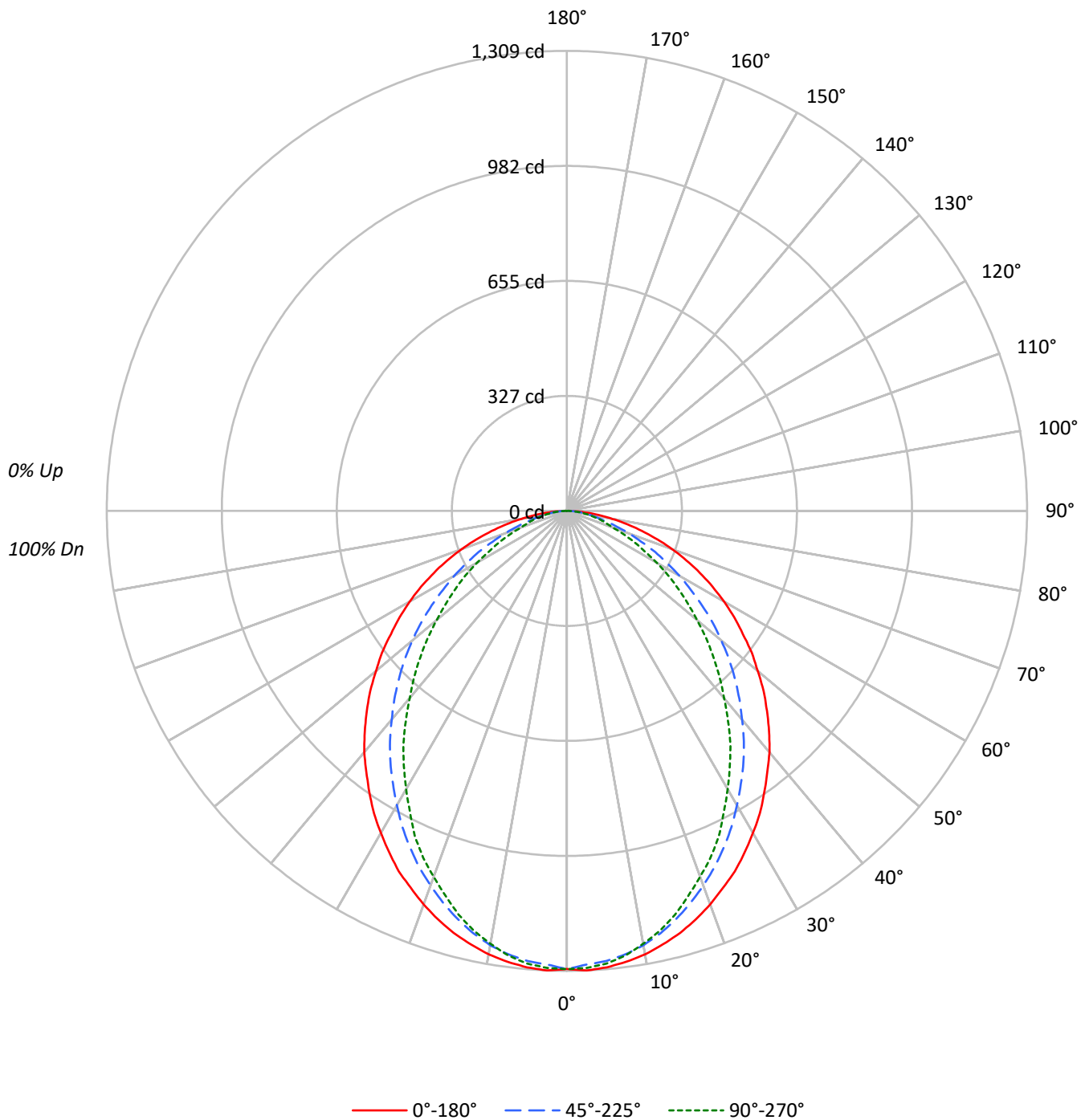
Lumens per Lamp: N/A
Luminaire Lumens: 2945.0 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.9
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	88	88	86
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64	64	64	62
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	56	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	49	49	47
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44	44	44	42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	39	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	35	35	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	32	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	29	29	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14032	14032	14032
5°	14085	13891	13971
10°	14006	13716	13670
15°	13855	13396	13254
20°	13648	12994	12692
25°	13435	12544	12142
30°	13154	12024	11366
35°	12864	11503	10655
40°	12597	10890	9775
45°	12248	10284	8980
50°	11861	9595	8092
55°	11468	8809	7261
60°	11106	7965	6351
65°	10636	7055	5440
70°	10049	5923	4393
75°	9191	4662	4134
80°	8195	4128	3800
85°	6916	3656	3396

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12248 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.5	4.2
10°-20°	340.9	11.6
20°-30°	490.8	16.7
30°-40°	552.8	18.8
40°-50°	528.7	18.0
50°-60°	432.8	14.7
60°-70°	291.8	9.9
70°-80°	146.4	5.0
80°-90°	38.3	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	954.3	32.4
0°-40°	1507.0	51.2
0°-60°	2468.6	83.8
0°-90°	2945.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2945.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1304	1304	1304	1304	1304	
5°	1304	1298	1286	1295	1293	124
15°	1243	1232	1202	1197	1189	350
25°	1131	1105	1056	1034	1022	520
35°	979	941	875	830	811	613
45°	805	757	676	615	590	621
55°	611	559	469	408	387	548
65°	418	360	277	225	214	413
75°	221	170	112	102	99	235
85°	56	33	30	28	28	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1303.6	1303.6	1303.6	1303.6	1303.6
2.5°	1308.9	1304.6	1291.9	1303.6	1301.5
5°	1303.6	1298.3	1285.6	1295.1	1293.0
7.5°	1294.1	1288.8	1272.9	1279.3	1276.1
10°	1281.4	1274.0	1254.9	1256.0	1250.7
12.5°	1263.4	1254.9	1230.6	1229.6	1223.2
15°	1243.3	1231.7	1202.1	1196.8	1189.4
17.5°	1219.0	1206.3	1169.3	1158.7	1148.2
20°	1191.5	1174.6	1134.4	1120.7	1108.0
22.5°	1160.8	1140.8	1097.4	1079.4	1067.8
25°	1131.2	1104.8	1056.2	1034.0	1022.3
27.5°	1095.3	1066.8	1013.9	984.3	966.3
30°	1058.3	1026.6	967.4	931.4	914.5
32.5°	1021.3	984.3	920.9	880.7	862.7
35°	979.0	940.9	875.4	829.9	810.9
37.5°	936.7	895.5	826.8	776.0	752.8
40°	896.5	850.0	775.0	720.0	695.7
42.5°	851.1	804.6	726.3	665.0	643.9
45°	804.6	757.0	675.6	615.3	589.9
47.5°	759.1	706.2	625.9	560.3	538.1
50°	708.3	658.7	573.0	507.5	483.2
52.5°	662.9	607.9	523.3	454.6	433.5
55°	611.1	559.3	469.4	408.1	386.9
57.5°	564.6	508.5	417.6	359.5	341.5
60°	515.9	457.8	370.0	312.9	295.0
62.5°	467.3	409.2	321.4	268.5	249.5
65°	417.6	359.5	277.0	225.2	213.6
67.5°	367.9	308.7	228.4	189.2	176.6
70°	319.3	262.2	188.2	151.2	139.6
72.5°	270.7	214.6	149.1	120.5	117.4
75°	221.0	170.2	112.1	101.5	99.4
77.5°	175.5	129.0	87.8	81.4	79.3
80°	132.2	88.8	66.6	63.4	61.3
82.5°	90.9	55.0	47.6	44.4	44.4
85°	56.0	32.8	29.6	27.5	27.5
87.5°	25.4	13.7	13.7	12.7	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)