

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: P995012

Luminaire Tested: S123RDR-B775DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P995012
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-B775DB30-4F0-XX-W2A-F
Description: Define 3 Regressed Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

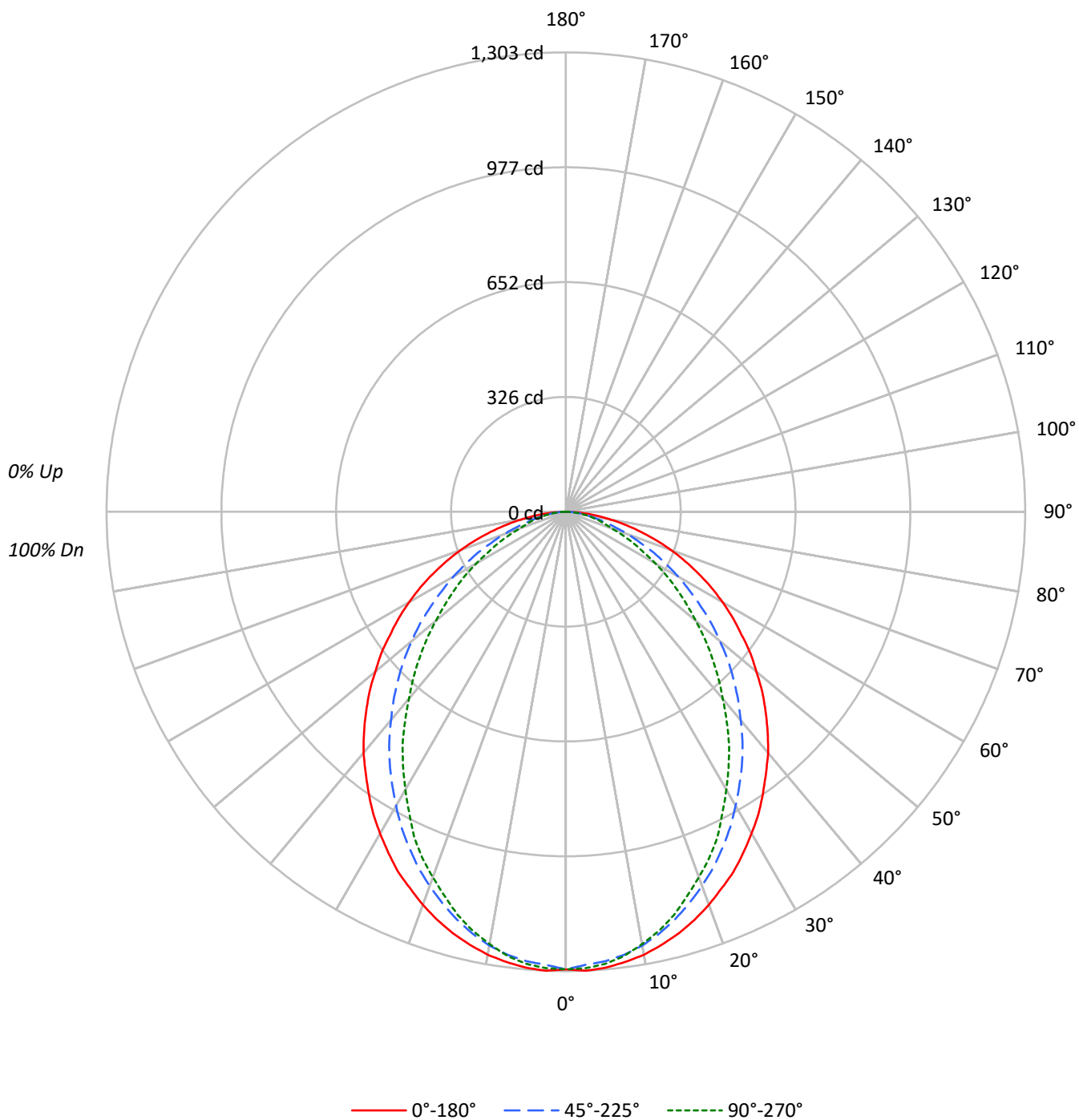
Lumens per Lamp: N/A
Luminaire Lumens: 2932.0 lumens
Efficiency: N/A
Efficacy: 81.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	105	101	98	107	103	99	96	99	96	93		95	93	90		91
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	92	82	75	68	90	81	74	68	78	72	67		75	70	66		73
4	85	73	65	59	83	72	64	58	70	63	58		67	62	57		65
5	78	66	57	51	76	65	57	51	63	56	50		61	55	50		59
6	73	60	51	45	71	59	51	45	57	50	45		55	49	44		54
7	67	54	46	40	66	54	46	40	52	45	40		51	44	39		49
8	63	50	42	36	61	49	41	36	48	41	36		47	40	36		46
9	59	46	38	33	58	45	38	33	44	37	32		43	37	32		42
10	55	43	35	30	54	42	35	30	41	34	30		40	34	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13969	13969	13969
5°	14023	13829	13909
10°	13943	13656	13610
15°	13794	13337	13195
20°	13588	12937	12636
25°	13376	12488	12088
30°	13095	11970	11317
35°	12808	11452	10608
40°	12542	10841	9732
45°	12193	10239	8940
50°	11809	9553	8055
55°	11417	8769	7229
60°	11059	7931	6323
65°	10590	7025	5415
70°	10005	5898	4371
75°	9149	4641	4113
80°	8157	4110	3781
85°	6891	3643	3384

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12193 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.0	4.2
10°-20°	339.4	11.6
20°-30°	488.7	16.7
30°-40°	550.3	18.8
40°-50°	526.4	18.0
50°-60°	430.9	14.7
60°-70°	290.5	9.9
70°-80°	145.7	5.0
80°-90°	38.1	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°	950.1	32.4
0°-40°	1500.4	51.2
0°-60°	2457.7	83.8
0°-90°	2932.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2932.0	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	65
90°	0	0	0	0	0	

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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°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)