

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: P995000

Luminaire Tested: S123RDR-B775DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P995000
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-B775DB27-4F0-XX-W2A-F
Description: Define 3 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

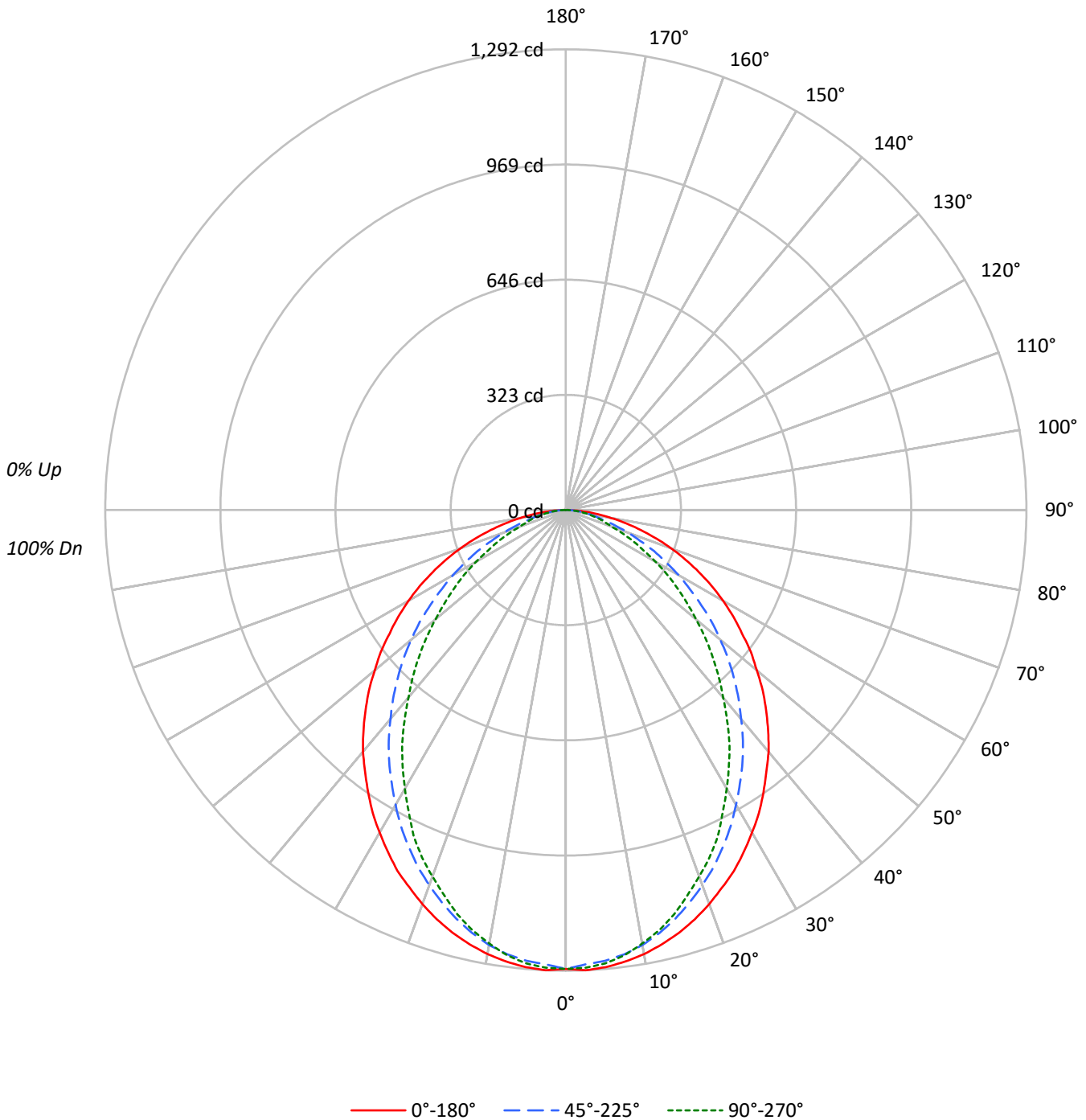
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2907.0 lumens
Efficiency: N/A
Efficacy: 81.0 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				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	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	88	86
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	75	73
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64	64	64	64	62
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	56	56	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	49	49	49	47
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44	44	44	44	42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	39	39	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	35	35	35	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	32	32	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	29	29	29	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13851	13851	13851
5°	13904	13712	13790
10°	13824	13539	13494
15°	13677	13223	13083
20°	13472	12827	12528
25°	13261	12383	11986
30°	12983	11869	11220
35°	12699	11355	10518
40°	12435	10749	9649
45°	12090	10152	8864
50°	11709	9471	7986
55°	11320	8696	7169
60°	10964	7864	6269
65°	10499	6963	5369
70°	9920	5847	4337
75°	9070	4600	4080
80°	8083	4073	3750
85°	6830	3606	3347

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12090 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.0	4.2
10°-20°	336.5	11.6
20°-30°	484.5	16.7
30°-40°	545.6	18.8
40°-50°	521.9	18.0
50°-60°	427.2	14.7
60°-70°	288.0	9.9
70°-80°	144.5	5.0
80°-90°	37.8	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°	942.0	32.4
0°-40°	1487.6	51.2
0°-60°	2436.7	83.8
0°-90°	2907.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2907.0	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	64
90°	0	0	0	0	0	



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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°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)