

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: P1059373

Luminaire Tested: S123RDR-S775D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059373
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D930-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

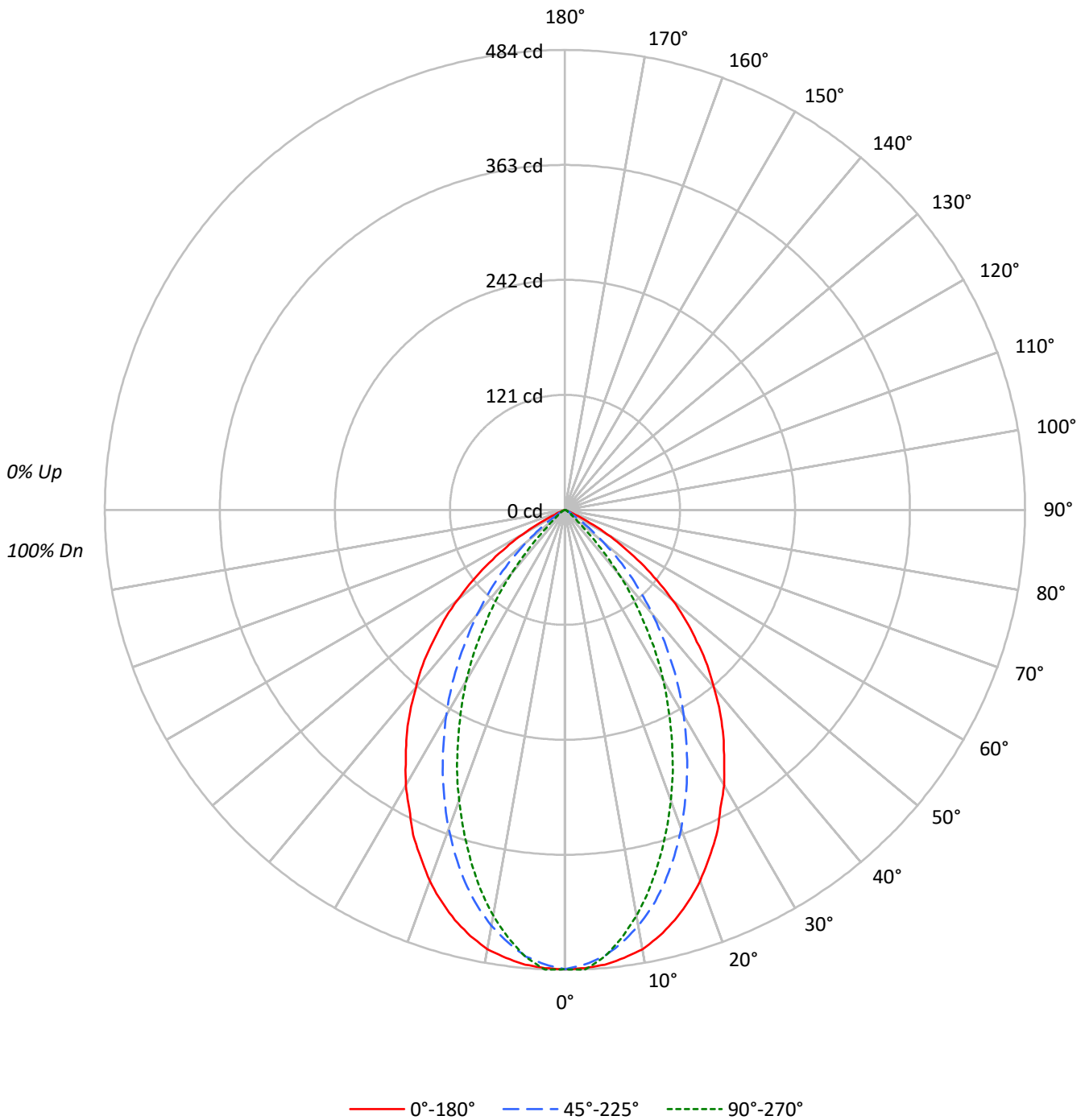
Lumens per Lamp: N/A
Luminaire Lumens: 551.8 lumens
Efficiency: N/A
Efficacy: 21.4 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
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	0
RW	70	50	30	10	70	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	100
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5677	5677	5677
5°	5663	5561	5571
10°	5598	5301	5171
15°	5433	4932	4647
20°	5196	4466	4067
25°	4892	3944	3440
30°	4540	3388	2808
35°	4163	2801	2087
40°	3736	2197	1337
45°	3258	1603	556
50°	2702	954	214
55°	1992	399	160
60°	1207	146	92
65°	325	86	44
70°	0	27	27
75°	0	0	36
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3258 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.5	8.1
10°-20°	114.9	20.8
20°-30°	143.2	25.9
30°-40°	128.0	23.2
40°-50°	80.8	14.6
50°-60°	33.8	6.1
60°-70°	6.4	1.2
70°-80°	0.2	0.0
80°-90°	0.0	0.0
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°	302.6	54.8
0°-40°	430.6	78.0
0°-60°	545.2	98.8
0°-90°	551.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	551.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	484	484	484	484	484	
5°	480	480	472	473	473	45
15°	447	436	406	388	382	125
25°	378	347	304	278	266	173
35°	290	248	195	160	146	181
45°	196	153	96	51	34	151
55°	97	67	20	8	8	87
65°	12	9	3	2	2	16
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	483.5	483.5	483.5	483.5	483.5
2.5°	482.7	483.5	478.8	483.5	484.3
5°	480.4	479.6	471.8	473.4	472.6
7.5°	475.7	473.4	459.4	456.3	454.7
10°	469.5	463.3	444.6	436.8	433.7
12.5°	459.4	450.8	426.7	414.2	409.6
15°	446.9	436.0	405.7	388.5	382.3
17.5°	432.1	416.6	382.3	363.6	354.3
20°	415.8	394.0	357.4	334.8	325.5
22.5°	396.3	372.2	330.9	306.8	296.7
25°	377.6	347.3	304.4	278.0	265.5
27.5°	354.3	322.3	276.4	249.2	235.9
30°	334.8	298.2	249.9	219.6	207.1
32.5°	311.4	273.3	222.7	189.2	177.5
35°	290.4	248.4	195.4	160.4	145.6
37.5°	267.8	224.2	168.2	131.6	117.6
40°	243.7	200.1	143.3	102.8	87.2
42.5°	221.9	176.0	118.3	76.3	60.7
45°	196.2	152.6	96.5	51.4	33.5
47.5°	172.9	130.8	73.2	28.8	17.9
50°	147.9	108.2	52.2	14.8	11.7
52.5°	122.2	86.4	34.3	10.1	9.3
55°	97.3	67.0	19.5	7.8	7.8
57.5°	73.2	48.3	10.1	6.2	5.5
60°	51.4	31.9	6.2	4.7	3.9
62.5°	29.6	18.7	4.7	3.1	3.1
65°	11.7	8.6	3.1	1.6	1.6
67.5°	0.8	2.3	1.6	0.8	0.8
70°	0.0	0.0	0.8	0.8	0.8
72.5°	0.0	0.0	0.8	0.8	0.8
75°	0.0	0.0	0.0	0.0	0.8
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)