

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: P1059374

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059374
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
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-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

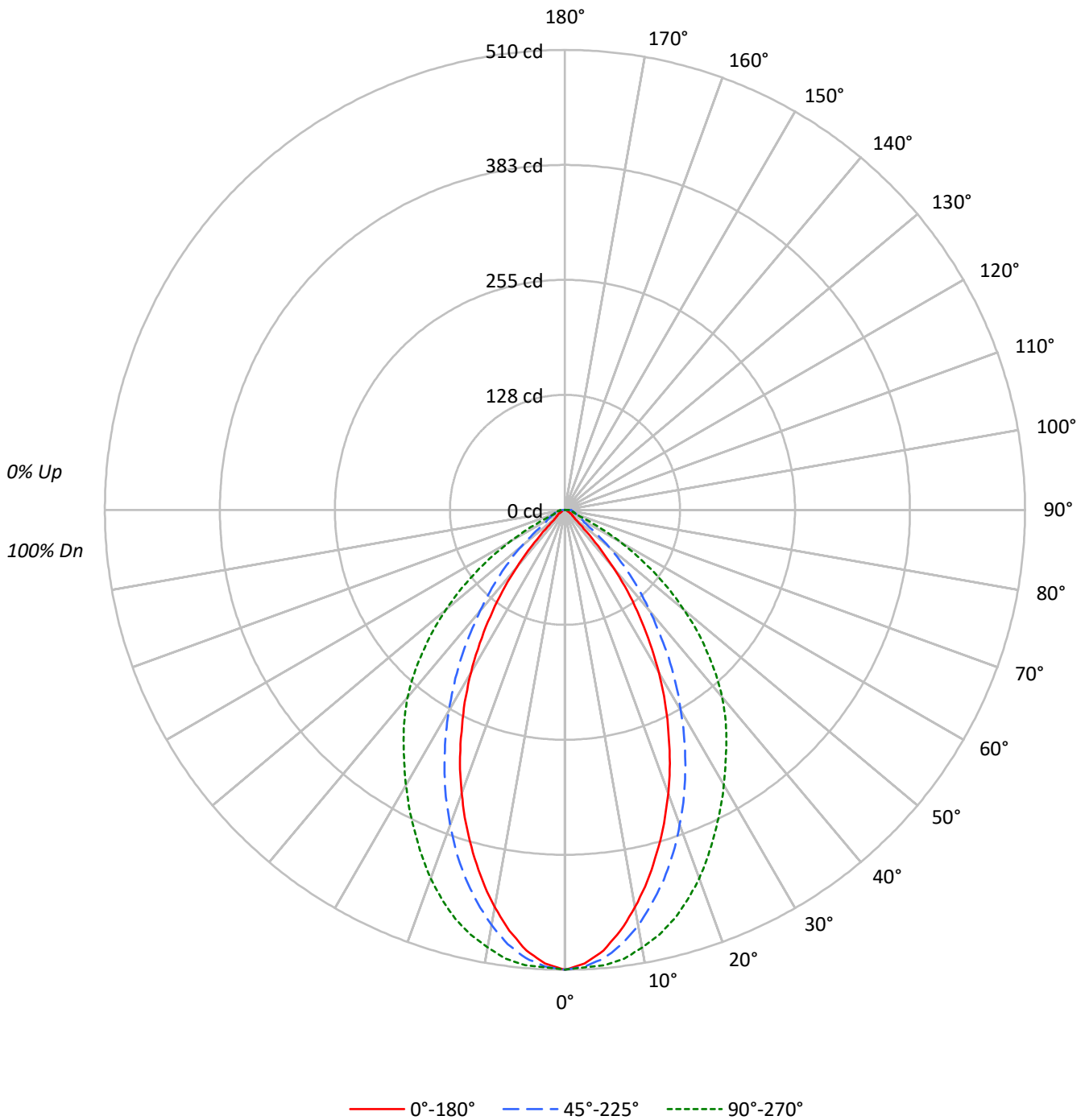
Lumens per Lamp: N/A
Luminaire Lumens: 612.5 lumens
Efficiency: N/A
Efficacy: 23.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5987	5987	5987
5°	5780	5882	5974
10°	5336	5578	5875
15°	4786	5156	5706
20°	4180	4647	5436
25°	3515	4092	5101
30°	2823	3489	4778
35°	2067	2873	4471
40°	1278	2235	4159
45°	492	1684	3703
50°	243	1155	3133
55°	192	639	2459
60°	129	531	1649
65°	108	478	736
70°	106	429	429
75°	141	458	426
80°	210	582	473
85°	310	943	633

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3703 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.7	7.6
10°-20°	119.7	19.5
20°-30°	148.6	24.3
30°-40°	133.1	21.7
40°-50°	87.5	14.3
50°-60°	43.8	7.2
60°-70°	17.3	2.8
70°-80°	9.7	1.6
80°-90°	6.1	1.0
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°	315.0	51.4
0°-40°	448.1	73.2
0°-60°	579.4	94.6
0°-90°	612.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	612.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	510	510	510	510	510	
5°	490	498	499	502	507	45
15°	394	406	424	453	469	110
25°	271	288	316	360	394	124
35°	144	164	200	262	312	89
45°	30	49	101	171	223	28
55°	9	11	31	84	120	8
65°	4	11	17	22	26	4
75°	3	10	10	9	9	3
85°	2	7	7	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	509.9	509.9	509.9	509.9	509.9
2.5°	503.7	510.7	506.8	506.8	507.6
5°	490.4	498.2	499.0	502.1	506.8
7.5°	470.9	481.0	485.7	495.1	502.1
10°	447.5	458.4	467.8	484.2	492.7
12.5°	421.8	432.7	446.7	469.4	482.6
15°	393.7	406.2	424.1	453.0	469.4
17.5°	364.9	377.4	399.2	431.9	453.0
20°	334.5	348.5	371.9	409.3	435.0
22.5°	304.1	319.7	344.6	385.2	414.8
25°	271.3	288.5	315.8	360.2	393.7
27.5°	240.1	258.1	286.9	335.3	373.5
30°	208.2	226.1	257.3	309.5	352.4
32.5°	175.4	195.7	228.4	285.4	331.4
35°	144.2	163.7	200.4	262.0	311.9
37.5°	113.8	133.3	171.5	239.4	292.4
40°	83.4	103.7	145.8	217.5	271.3
42.5°	54.6	75.6	123.2	195.7	247.9
45°	29.6	49.1	101.4	170.7	223.0
47.5°	16.4	26.5	81.9	147.4	198.8
50°	13.3	14.8	63.2	125.5	171.5
52.5°	10.9	12.5	45.2	104.5	146.6
55°	9.4	10.9	31.2	84.2	120.1
57.5°	7.8	9.4	24.9	64.7	94.3
60°	5.5	9.4	22.6	47.6	70.2
62.5°	4.7	9.4	19.5	32.7	46.8
65°	3.9	10.9	17.2	21.8	26.5
67.5°	3.1	10.9	14.8	14.0	14.0
70°	3.1	10.9	12.5	11.7	12.5
72.5°	3.1	11.7	11.7	10.9	10.9
75°	3.1	10.1	10.1	9.4	9.4
77.5°	3.1	9.4	9.4	8.6	8.6
80°	3.1	8.6	8.6	7.8	7.0
82.5°	3.1	7.8	7.8	7.0	6.2
85°	2.3	7.0	7.0	7.0	4.7
87.5°	2.3	6.2	7.0	6.2	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)