

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: P1059384

Luminaire Tested: S123RDR-S775D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059384
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

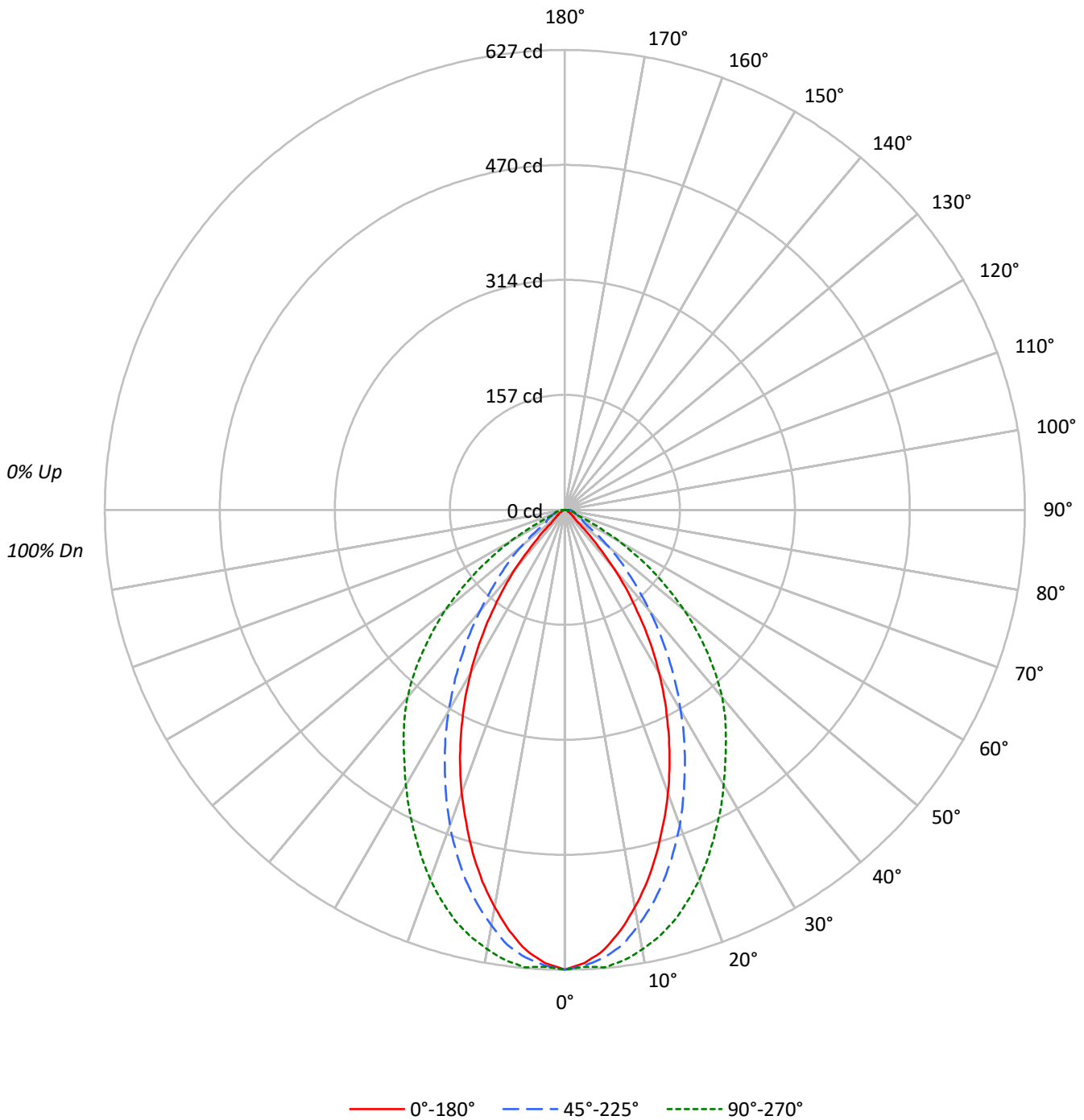
Lumens per Lamp: N/A
Luminaire Lumens: 752.5 lumens
Efficiency: N/A
Efficacy: 29.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	69	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	65	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
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	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7360	7360	7360
5°	7107	7222	7378
10°	6560	6864	7257
15°	5887	6348	7039
20°	5136	5722	6700
25°	4333	5015	6285
30°	3485	4289	5874
35°	2550	3531	5490
40°	1591	2751	5114
45°	601	2051	4555
50°	285	1414	3882
55°	219	776	3001
60°	155	658	1973
65°	114	572	822
70°	113	536	536
75°	150	563	563
80°	223	669	615
85°	445	1105	889

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4555 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.5	7.6
10°-20°	147.5	19.6
20°-30°	182.6	24.3
30°-40°	163.7	21.8
40°-50°	107.3	14.3
50°-60°	53.7	7.1
60°-70°	20.9	2.8
70°-80°	11.8	1.6
80°-90°	7.3	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°	387.7	51.5
0°-40°	551.4	73.3
0°-60°	712.5	94.7
0°-90°	752.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	752.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	603	613	613	619	626	56
15°	484	504	522	557	579	135
25°	334	355	387	442	485	153
35°	178	202	246	320	383	111
45°	36	58	124	212	274	35
55°	11	13	38	104	147	10
65°	4	12	21	27	30	4
75°	3	12	12	12	12	3
85°	3	8	8	8	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	626.8	626.8	626.8	626.8	626.8
2.5°	618.5	627.6	621.8	622.6	623.5
5°	602.9	612.7	612.7	619.3	625.9
7.5°	579.0	590.5	598.7	610.3	619.3
10°	550.2	564.2	575.7	596.3	608.6
12.5°	518.9	536.2	551.0	578.2	595.5
15°	484.3	504.0	522.2	556.7	579.0
17.5°	447.2	467.0	490.9	531.2	558.4
20°	411.0	430.7	457.9	503.2	536.2
22.5°	373.1	393.7	422.5	472.7	511.4
25°	334.4	355.0	387.1	442.3	485.1
27.5°	295.7	316.3	352.5	412.6	459.6
30°	257.0	277.5	316.3	380.5	433.2
32.5°	218.3	240.5	280.8	350.8	406.9
35°	177.9	201.8	246.3	320.4	383.0
37.5°	140.8	163.1	213.3	294.0	359.1
40°	103.8	127.7	179.5	268.5	333.6
42.5°	67.5	93.1	149.1	240.5	304.7
45°	36.2	58.5	123.5	211.7	274.3
47.5°	19.8	32.1	99.7	181.2	243.0
50°	15.6	18.1	77.4	154.8	212.5
52.5°	13.2	14.8	55.2	130.1	178.7
55°	10.7	13.2	37.9	103.8	146.6
57.5°	9.1	11.5	29.6	80.7	114.5
60°	6.6	9.9	28.0	59.3	84.0
62.5°	4.9	10.7	24.7	41.2	55.2
65°	4.1	12.4	20.6	27.2	29.6
67.5°	3.3	13.2	18.1	17.3	17.3
70°	3.3	12.4	15.6	14.8	15.6
72.5°	3.3	13.2	14.0	13.2	14.0
75°	3.3	12.4	12.4	12.4	12.4
77.5°	3.3	11.5	11.5	10.7	10.7
80°	3.3	9.9	9.9	9.9	9.1
82.5°	3.3	9.1	9.1	9.1	7.4
85°	3.3	8.2	8.2	8.2	6.6
87.5°	2.5	7.4	8.2	7.4	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)