

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: P1059347

Luminaire Tested: S123RDR-S775D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059347
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-S775D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

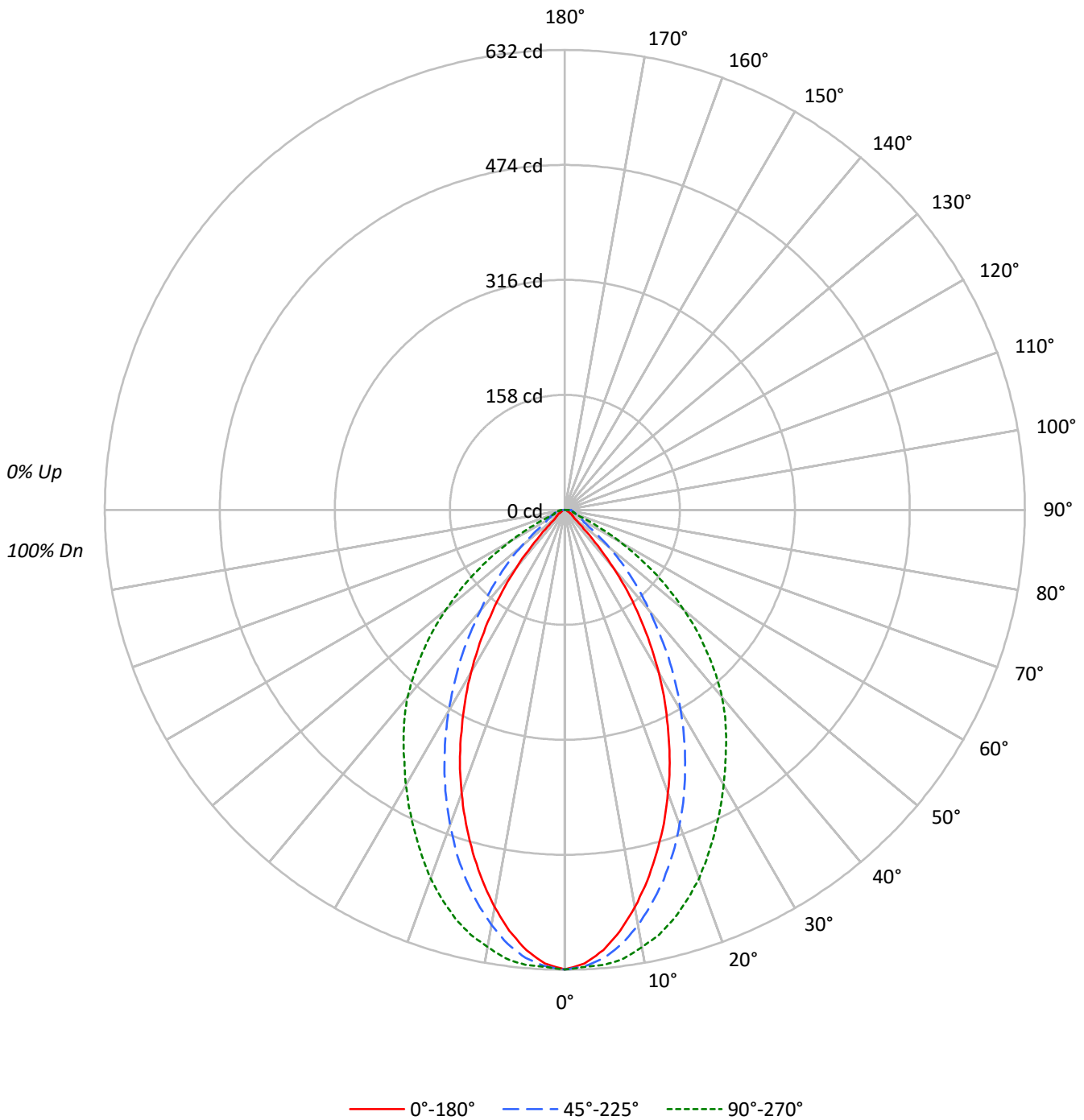
Lumens per Lamp: N/A
Luminaire Lumens: 758.7 lumens
Efficiency: N/A
Efficacy: 29.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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°	7417	7417	7417
5°	7160	7286	7399
10°	6609	6909	7277
15°	5929	6387	7068
20°	5177	5756	6734
25°	4355	5067	6319
30°	3496	4321	5919
35°	2562	3558	5538
40°	1583	2768	5152
45°	609	2084	4587
50°	300	1429	3882
55°	237	790	3044
60°	160	658	2041
65°	133	589	911
70°	134	532	532
75°	177	572	526
80°	264	717	588
85°	391	1172	781

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4587 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.9	7.6
10°-20°	148.3	19.5
20°-30°	184.0	24.3
30°-40°	164.8	21.7
40°-50°	108.4	14.3
50°-60°	54.3	7.2
60°-70°	21.4	2.8
70°-80°	12.0	1.6
80°-90°	7.6	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°	390.2	51.4
0°-40°	555.0	73.2
0°-60°	717.7	94.6
0°-90°	758.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	758.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	607	617	618	622	628	56
15°	488	503	525	561	581	136
25°	336	357	391	446	488	154
35°	179	203	248	324	386	111
45°	37	61	126	212	276	35
55°	12	14	39	104	149	10
65°	5	14	21	27	33	5
75°	4	13	13	12	12	4
85°	3	9	9	9	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	631.6	631.6	631.6	631.6	631.6
2.5°	623.9	632.5	627.7	627.7	628.7
5°	607.4	617.1	618.1	621.9	627.7
7.5°	583.3	595.8	601.6	613.2	621.9
10°	554.3	567.8	579.4	599.7	610.3
12.5°	522.5	536.0	553.4	581.4	597.8
15°	487.7	503.1	525.4	561.1	581.4
17.5°	452.0	467.4	494.4	535.0	561.1
20°	414.3	431.7	460.6	507.0	538.9
22.5°	376.6	395.9	426.8	477.1	513.8
25°	336.1	357.3	391.1	446.2	487.7
27.5°	297.4	319.7	355.4	415.3	462.6
30°	257.8	280.1	318.7	383.4	436.5
32.5°	217.3	242.4	283.0	353.5	410.4
35°	178.7	202.8	248.2	324.5	386.3
37.5°	141.0	165.1	212.5	296.5	362.1
40°	103.3	128.4	180.6	269.4	336.1
42.5°	67.6	93.7	152.6	242.4	307.1
45°	36.7	60.8	125.5	211.5	276.2
47.5°	20.3	32.8	101.4	182.5	246.3
50°	16.4	18.3	78.2	155.5	212.5
52.5°	13.5	15.5	56.0	129.4	181.6
55°	11.6	13.5	38.6	104.3	148.7
57.5°	9.7	11.6	30.9	80.2	116.9
60°	6.8	11.6	28.0	58.9	86.9
62.5°	5.8	11.6	24.1	40.6	57.9
65°	4.8	13.5	21.2	27.0	32.8
67.5°	3.9	13.5	18.3	17.4	17.4
70°	3.9	13.5	15.5	14.5	15.5
72.5°	3.9	14.5	14.5	13.5	13.5
75°	3.9	12.6	12.6	11.6	11.6
77.5°	3.9	11.6	11.6	10.6	10.6
80°	3.9	10.6	10.6	9.7	8.7
82.5°	3.9	9.7	9.7	8.7	7.7
85°	2.9	8.7	8.7	8.7	5.8
87.5°	2.9	7.7	8.7	7.7	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)