

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: P1059395

Luminaire Tested: S123RDR-S775D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059395
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D940-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

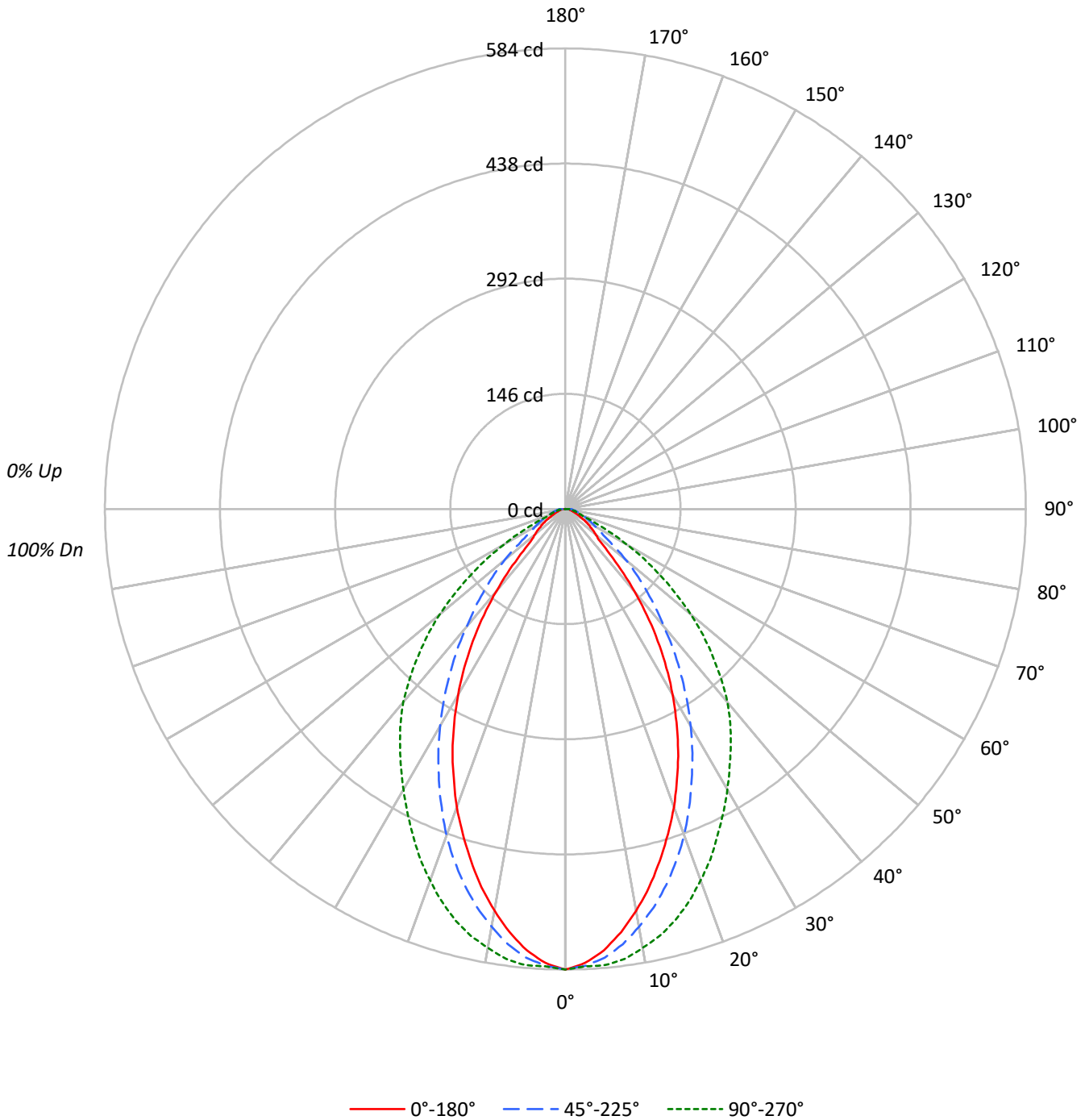
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 782.1 lumens
Efficiency: N/A
Efficacy: 30.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6858	6858	6858
5°	6622	6733	6844
10°	6170	6415	6739
15°	5618	6001	6561
20°	5028	5508	6264
25°	4386	4916	5921
30°	3688	4312	5571
35°	2933	3654	5242
40°	2091	2980	4901
45°	1245	2393	4389
50°	919	1821	3800
55°	768	1239	3020
60°	620	1022	2123
65°	497	875	1136
70°	409	762	704
75°	386	735	658
80°	406	805	636
85°	579	1145	808

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4389 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	6.9
10°-20°	139.4	17.8
20°-30°	177.8	22.7
30°-40°	167.2	21.4
40°-50°	120.2	15.4
50°-60°	68.9	8.8
60°-70°	31.5	4.0
70°-80°	15.8	2.0
80°-90°	7.7	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°	370.8	47.4
0°-40°	538.0	68.8
0°-60°	727.1	93.0
0°-90°	782.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	782.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	562	573	571	576	581	52
15°	462	478	494	520	540	129
25°	338	354	379	420	457	155
35°	205	219	255	313	366	127
45°	75	91	144	212	264	63
55°	38	38	60	112	148	34
65°	18	25	32	35	41	18
75°	8	17	16	14	14	9
85°	4	8	8	8	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	584.0	584.0	584.0	584.0	584.0
2.5°	576.3	584.9	579.7	579.7	580.6
5°	561.8	572.9	571.2	575.5	580.6
7.5°	541.4	553.3	556.7	567.0	575.5
10°	517.5	531.1	538.0	554.2	565.2
12.5°	491.1	506.4	517.5	538.0	554.2
15°	462.1	478.3	493.6	520.1	539.7
17.5°	432.2	448.4	468.1	498.7	521.8
20°	402.4	418.6	440.8	473.2	501.3
22.5°	370.0	386.2	410.1	446.7	480.8
25°	338.5	353.8	379.4	420.3	457.0
27.5°	305.2	320.6	348.7	393.0	434.0
30°	272.0	287.3	318.0	365.7	410.9
32.5°	238.7	253.2	286.5	339.3	387.9
35°	204.6	219.1	254.9	312.9	365.7
37.5°	169.7	184.2	225.9	289.0	343.6
40°	136.4	152.6	194.4	265.1	319.7
42.5°	104.0	121.1	168.8	239.6	292.4
45°	75.0	91.2	144.1	212.3	264.3
47.5°	57.1	65.6	121.9	185.0	237.0
50°	50.3	51.2	99.7	160.3	208.0
52.5°	43.5	44.3	77.6	136.4	177.3
55°	37.5	38.4	60.5	111.7	147.5
57.5°	31.5	33.2	49.4	88.7	118.5
60°	26.4	29.8	43.5	67.4	90.4
62.5°	21.3	27.3	37.5	49.4	64.8
65°	17.9	24.7	31.5	35.0	40.9
67.5°	14.5	23.0	26.4	24.7	24.7
70°	11.9	20.5	22.2	20.5	20.5
72.5°	10.2	19.6	18.8	17.1	17.1
75°	8.5	17.1	16.2	14.5	14.5
77.5°	7.7	14.5	13.6	12.8	11.9
80°	6.0	11.9	11.9	11.1	9.4
82.5°	5.1	10.2	10.2	9.4	7.7
85°	4.3	8.5	8.5	7.7	6.0
87.5°	3.4	7.7	7.7	6.8	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)