

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: P1057973

Luminaire Tested: S122RDR-S485D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057973
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D840-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

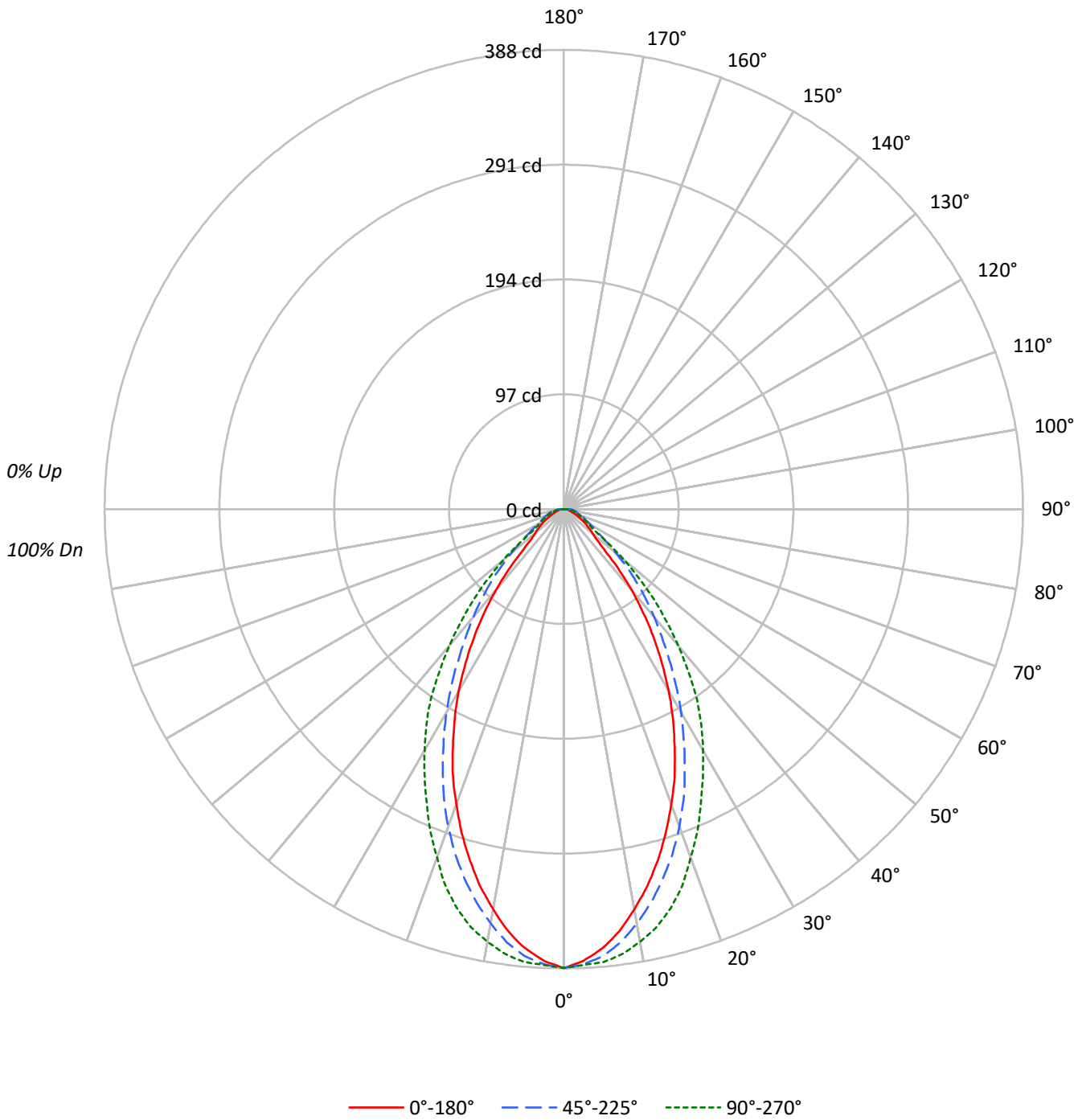
Lumens per Lamp: N/A
Luminaire Lumens: 467.7 lumens
Efficiency: N/A
Efficacy: 23.9 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7154	7154	7154
5°	6904	7022	7115
10°	6432	6661	6955
15°	5863	6176	6669
20°	5212	5604	6152
25°	4514	4923	5579
30°	3780	4221	5014
35°	2980	3496	4415
40°	2137	2859	3618
45°	1250	2260	2800
50°	904	1642	1889
55°	759	1174	991
60°	609	952	845
65°	498	843	782
70°	426	809	734
75°	406	870	713
80°	457	1063	765
85°	762	1673	1059

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2800 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.5	7.6
10°-20°	91.0	19.5
20°-30°	111.9	23.9
30°-40°	98.9	21.1
40°-50°	63.1	13.5
50°-60°	30.8	6.6
60°-70°	18.3	3.9
70°-80°	11.7	2.5
80°-90°	6.5	1.4
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°	238.4	51.0
0°-40°	337.3	72.1
0°-60°	431.2	92.2
0°-90°	467.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	467.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	388	388	388	388	388	
5°	373	380	379	380	384	35
15°	307	315	323	338	349	86
25°	222	230	242	257	274	101
35°	132	140	155	177	196	82
45°	48	62	87	97	107	40
55°	24	32	36	34	31	21
65°	11	22	19	18	18	11
75°	6	13	12	11	10	6
85°	4	7	8	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	387.7	387.7	387.7	387.7	387.7
2.5°	382.0	389.1	384.8	384.8	385.5
5°	372.7	380.5	379.1	380.5	384.1
7.5°	359.8	367.7	369.1	374.8	379.1
10°	343.3	351.2	355.5	364.8	371.2
12.5°	326.2	334.0	340.5	352.6	361.9
15°	306.9	315.4	323.3	337.6	349.1
17.5°	286.8	295.4	305.4	319.7	333.3
20°	265.4	273.2	285.4	299.0	313.3
22.5°	244.6	251.8	264.7	277.5	294.7
25°	221.7	229.6	241.8	256.8	274.0
27.5°	199.6	207.4	219.6	236.8	254.6
30°	177.4	184.5	198.1	216.0	235.3
32.5°	154.5	161.7	176.7	196.0	216.0
35°	132.3	139.5	155.2	176.7	196.0
37.5°	110.2	118.0	135.9	155.9	172.4
40°	88.7	98.0	118.7	135.9	150.2
42.5°	67.2	80.1	102.3	116.6	128.0
45°	47.9	61.5	86.6	97.3	107.3
47.5°	36.5	47.2	71.5	79.4	85.8
50°	31.5	38.6	57.2	62.9	65.8
52.5°	27.2	34.3	45.8	47.9	46.5
55°	23.6	31.5	36.5	34.3	30.8
57.5°	20.0	29.3	30.0	25.8	26.5
60°	16.5	26.5	25.8	22.2	22.9
62.5°	13.6	24.3	22.2	20.0	20.0
65°	11.4	21.5	19.3	17.9	17.9
67.5°	9.3	19.3	17.2	15.7	15.7
70°	7.9	17.2	15.0	13.6	13.6
72.5°	7.2	15.0	13.6	12.2	12.2
75°	5.7	12.9	12.2	10.7	10.0
77.5°	5.0	10.7	10.7	10.0	8.6
80°	4.3	9.3	10.0	8.6	7.2
82.5°	4.3	8.6	8.6	7.9	5.7
85°	3.6	7.2	7.9	7.2	5.0
87.5°	2.1	6.4	6.4	5.7	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)