

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: P1057855

Luminaire Tested: S122RDR-S1005D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057855
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D940-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

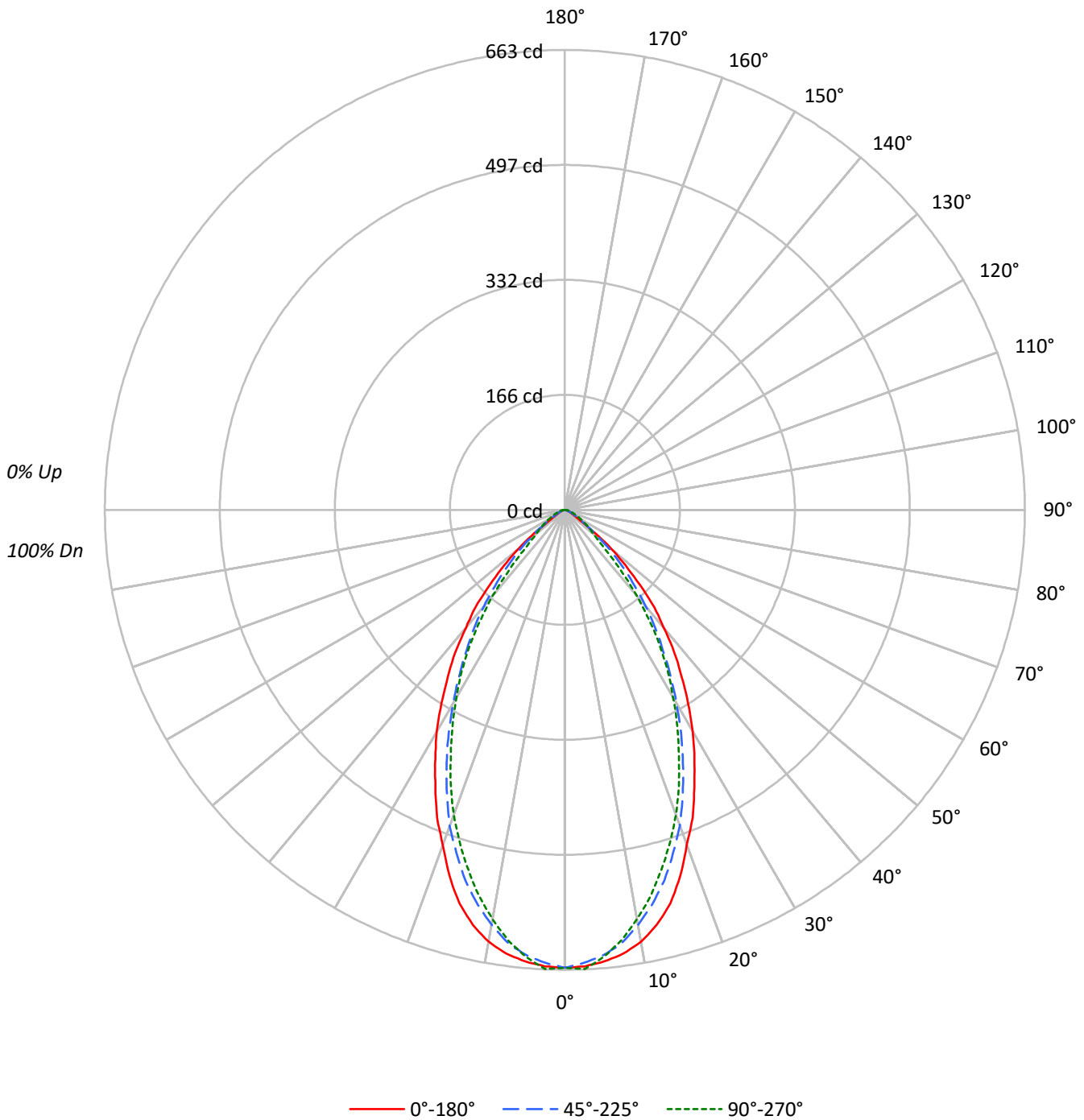
Lumens per Lamp: N/A
Luminaire Lumens: 709.8 lumens
Efficiency: N/A
Efficacy: 17.0 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92				
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84				
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76				
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64				
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59				
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54				
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50				
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47				
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12179	12179	12179
5°	12103	11932	11981
10°	11847	11379	11231
15°	11223	10570	10268
20°	10089	9520	9184
25°	8985	8207	7912
30°	7860	6848	6652
35°	6618	5548	5370
40°	5331	4379	3871
45°	3987	3163	2304
50°	2495	2041	1513
55°	846	1103	1229
60°	487	679	971
65°	345	458	747
70°	286	356	566
75°	185	285	471
80°	138	276	425
85°	0	0	275

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3987 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.8	8.6
10°-20°	155.7	21.9
20°-30°	187.5	26.4
30°-40°	160.2	22.6
40°-50°	93.9	13.2
50°-60°	34.0	4.8
60°-70°	12.1	1.7
70°-80°	4.8	0.7
80°-90°	0.8	0.1
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°	404.0	56.9
0°-40°	564.2	79.5
0°-60°	692.1	97.5
0°-90°	709.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	709.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	653	655	644	647	647	62
15°	588	578	553	543	538	163
25°	441	423	403	396	389	203
35°	294	271	246	244	238	183
45°	153	137	121	101	88	118
55°	26	37	34	36	38	33
65°	8	9	10	14	17	8
75°	3	4	4	5	7	3
85°	0	0	0	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	660.0	660.0	660.0	660.0	660.0
2.5°	658.7	660.0	653.4	660.0	662.6
5°	653.4	654.7	644.2	646.8	646.8
7.5°	645.5	644.2	629.7	627.1	625.7
10°	632.3	628.4	607.3	603.3	599.4
12.5°	612.6	604.7	582.3	575.7	570.4
15°	587.5	578.3	553.3	542.7	537.5
17.5°	553.3	542.7	519.0	508.5	503.2
20°	513.8	503.2	484.8	472.9	467.7
22.5°	480.8	463.7	443.9	436.0	429.5
25°	441.3	422.9	403.1	396.5	388.6
27.5°	404.4	382.0	362.3	357.0	350.4
30°	368.9	345.1	321.4	321.4	312.2
32.5°	330.7	308.3	283.2	281.9	276.6
35°	293.8	271.4	246.3	243.7	238.4
37.5°	259.5	237.1	213.4	205.5	198.9
40°	221.3	201.6	181.8	168.6	160.7
42.5°	191.0	168.6	148.9	133.1	122.5
45°	152.8	137.0	121.2	101.4	88.3
47.5°	118.6	108.0	94.8	72.5	65.9
50°	86.9	81.7	71.1	54.0	52.7
52.5°	55.3	58.0	51.4	42.2	46.1
55°	26.3	36.9	34.3	35.6	38.2
57.5°	17.1	18.4	25.0	29.0	31.6
60°	13.2	13.2	18.4	23.7	26.3
62.5°	10.5	10.5	14.5	19.8	21.1
65°	7.9	9.2	10.5	14.5	17.1
67.5°	6.6	6.6	7.9	11.9	13.2
70°	5.3	5.3	6.6	9.2	10.5
72.5°	4.0	4.0	5.3	7.9	7.9
75°	2.6	4.0	4.0	5.3	6.6
77.5°	2.6	2.6	2.6	4.0	5.3
80°	1.3	1.3	2.6	2.6	4.0
82.5°	1.3	1.3	1.3	1.3	2.6
85°	0.0	0.0	0.0	1.3	1.3
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)