

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: P1057940

Luminaire Tested: S122RDR-S290D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057940
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D940-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

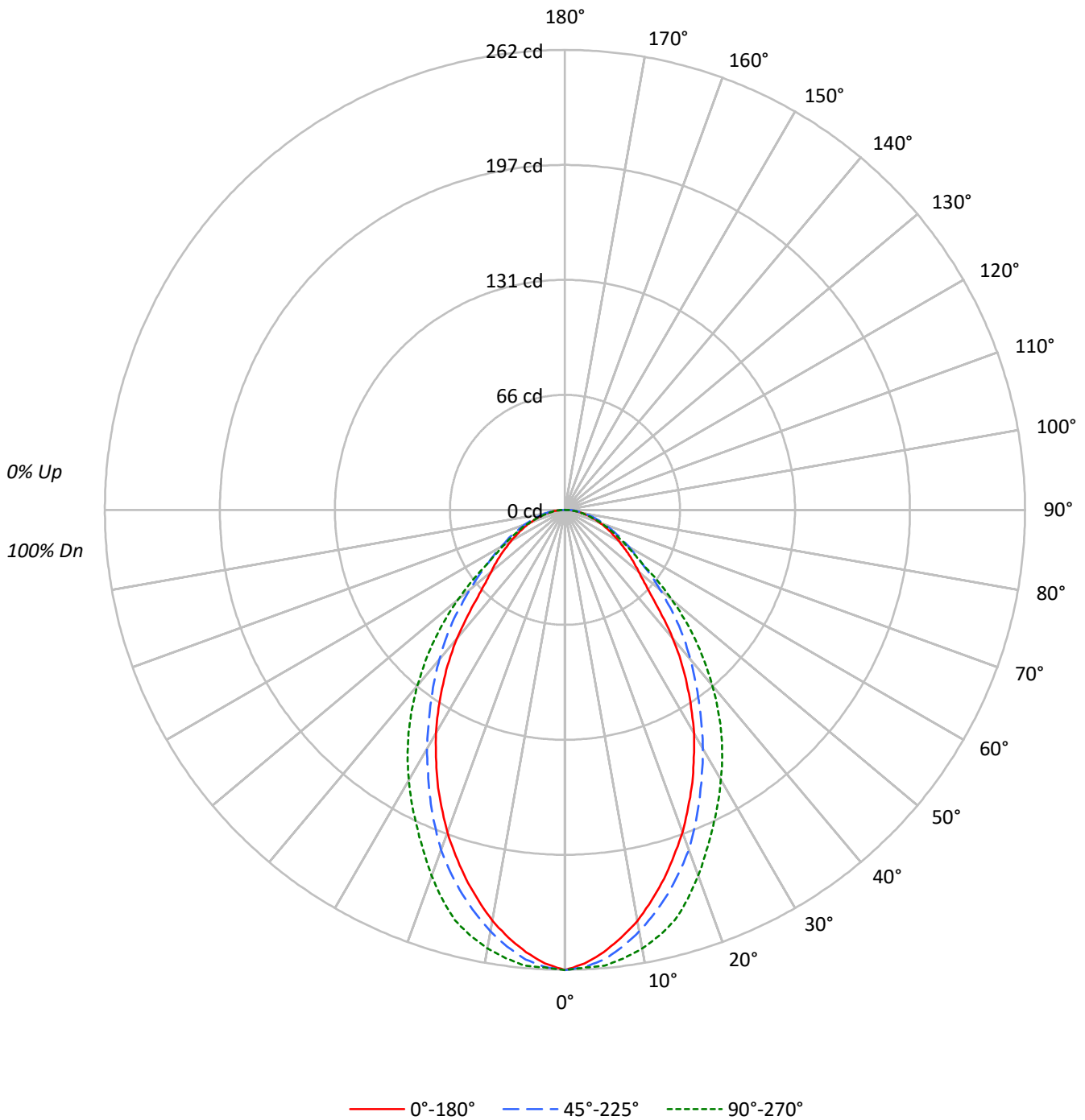
Lumens per Lamp: N/A
Luminaire Lumens: 426.9 lumens
Efficiency: N/A
Efficacy: 34.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4838	4838	4838
5°	4686	4764	4827
10°	4456	4570	4755
15°	4157	4325	4623
20°	3841	4049	4355
25°	3494	3695	4060
30°	3130	3347	3786
35°	2726	2991	3496
40°	2300	2676	3143
45°	1827	2364	2750
50°	1573	2032	2282
55°	1432	1737	1750
60°	1306	1546	1487
65°	1196	1397	1314
70°	1106	1295	1171
75°	1034	1219	1034
80°	967	1169	935
85°	974	1207	805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2750 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.2	5.7
10°-20°	64.0	15.0
20°-30°	84.2	19.7
30°-40°	84.7	19.8
40°-50°	68.6	16.1
50°-60°	47.3	11.1
60°-70°	30.9	7.2
70°-80°	17.2	4.0
80°-90°	5.8	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°	172.4	40.4
0°-40°	257.0	60.2
0°-60°	372.9	87.3
0°-90°	426.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	426.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	262	262	262	262	262	
5°	253	258	257	258	261	24
15°	218	223	226	235	242	61
25°	172	176	182	190	199	79
35°	121	127	133	145	155	75
45°	70	78	91	98	105	55
55°	44	50	54	55	54	40
65°	27	33	32	30	30	27
75°	14	18	17	15	14	15
85°	5	6	6	5	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	262.2	262.2	262.2	262.2	262.2
2.5°	258.7	263.3	260.6	260.6	261.0
5°	253.0	258.0	257.2	258.4	260.6
7.5°	245.8	251.1	251.1	254.5	257.6
10°	237.8	243.1	243.9	249.2	253.8
12.5°	227.9	233.2	235.5	242.4	248.5
15°	217.6	223.0	226.4	234.8	242.0
17.5°	206.6	211.9	216.5	225.2	232.5
20°	195.6	200.5	206.2	213.8	221.8
22.5°	183.4	188.7	194.0	201.3	210.4
25°	171.6	176.2	181.5	189.5	199.4
27.5°	159.0	164.0	168.9	178.4	188.7
30°	146.9	151.8	157.1	167.0	177.7
32.5°	133.9	139.3	144.6	155.6	166.7
35°	121.0	126.7	132.8	144.6	155.2
37.5°	108.4	114.5	121.8	133.9	143.1
40°	95.5	102.0	111.1	121.8	130.5
42.5°	81.8	89.8	100.8	110.0	118.0
45°	70.0	78.0	90.6	98.5	105.4
47.5°	61.3	67.7	79.9	86.8	92.5
50°	54.8	59.7	70.8	75.7	79.5
52.5°	49.5	54.4	62.0	65.4	66.6
55°	44.5	49.5	54.0	55.2	54.4
57.5°	39.6	44.9	47.6	46.4	46.4
60°	35.4	41.1	41.9	40.3	40.3
62.5°	31.2	36.9	36.9	35.0	35.0
65°	27.4	32.7	32.0	30.4	30.1
67.5°	24.0	28.9	27.8	26.3	25.9
70°	20.5	25.1	24.0	22.1	21.7
72.5°	17.5	21.7	20.2	18.6	17.9
75°	14.5	17.9	17.1	15.2	14.5
77.5°	11.8	14.5	13.7	12.2	11.4
80°	9.1	11.4	11.0	9.5	8.8
82.5°	6.8	8.8	8.4	7.2	6.1
85°	4.6	6.1	5.7	4.9	3.8
87.5°	2.3	4.2	3.8	3.4	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)