

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: P1057886

Luminaire Tested: S122RDR-S290D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057886
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-S290D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

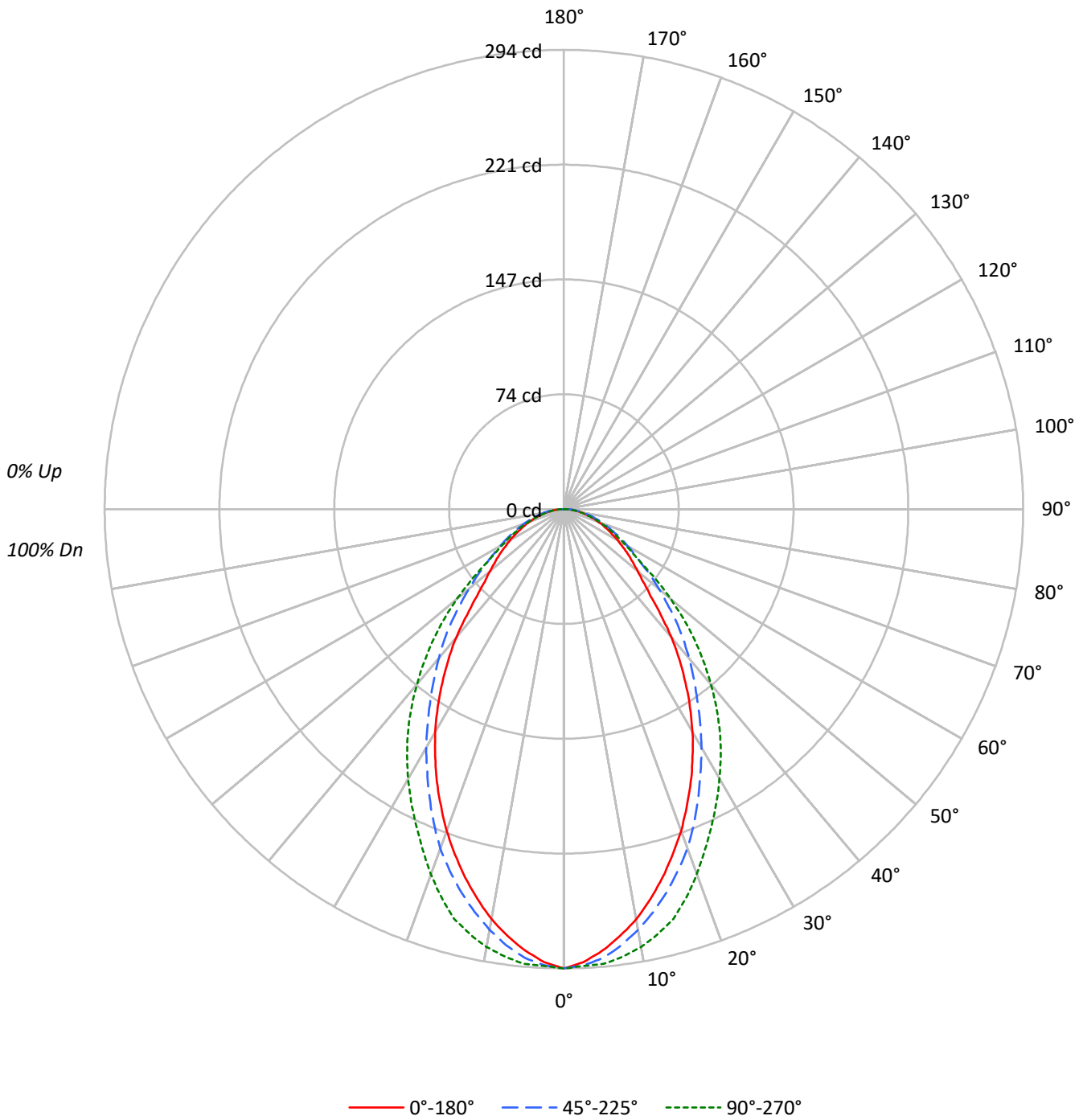
Lumens per Lamp: N/A
Luminaire Lumens: 478.7 lumens
Efficiency: N/A
Efficacy: 38.3 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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°	5425	5425	5425
5°	5257	5342	5414
10°	4997	5125	5333
15°	4663	4850	5185
20°	4306	4542	4886
25°	3917	4143	4553
30°	3509	3754	4246
35°	3057	3354	3922
40°	2580	3001	3526
45°	2049	2651	3085
50°	1763	2279	2561
55°	1605	1950	1962
60°	1465	1731	1668
65°	1340	1563	1471
70°	1241	1451	1311
75°	1155	1369	1155
80°	1084	1318	1041
85°	1080	1355	910

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3085 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.1	5.7
10°-20°	71.7	15.0
20°-30°	94.4	19.7
30°-40°	94.9	19.8
40°-50°	77.0	16.1
50°-60°	53.0	11.1
60°-70°	34.7	7.2
70°-80°	19.3	4.0
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°	193.3	40.4
0°-40°	288.2	60.2
0°-60°	418.2	87.4
0°-90°	478.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	478.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	294	294	294	294	294	
5°	284	289	288	290	292	27
15°	244	250	254	263	271	68
25°	192	198	204	212	224	88
35°	136	142	149	162	174	85
45°	78	88	102	110	118	62
55°	50	56	61	62	61	45
65°	31	37	36	34	34	31
75°	16	20	19	17	16	17
85°	5	7	6	6	4	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	294.0	294.0	294.0	294.0	294.0
2.5°	290.2	295.3	292.3	292.3	292.7
5°	283.8	289.3	288.4	289.7	292.3
7.5°	275.6	281.6	281.6	285.5	288.9
10°	266.7	272.7	273.5	279.5	284.6
12.5°	255.6	261.6	264.1	271.8	278.6
15°	244.1	250.0	253.9	263.3	271.4
17.5°	231.7	237.7	242.8	252.6	260.7
20°	219.3	224.9	231.3	239.8	248.8
22.5°	205.7	211.6	217.6	225.7	236.0
25°	192.4	197.6	203.5	212.5	223.6
27.5°	178.4	183.9	189.5	200.1	211.6
30°	164.7	170.3	176.2	187.3	199.3
32.5°	150.2	156.2	162.1	174.5	186.9
35°	135.7	142.1	148.9	162.1	174.1
37.5°	121.6	128.4	136.5	150.2	160.4
40°	107.1	114.4	124.6	136.5	146.4
42.5°	91.7	100.7	113.1	123.3	132.3
45°	78.5	87.5	101.6	110.5	118.2
47.5°	68.7	76.0	89.6	97.3	103.7
50°	61.4	67.0	79.4	84.9	89.2
52.5°	55.5	61.0	69.6	73.4	74.7
55°	49.9	55.5	60.6	61.9	61.0
57.5°	44.4	50.3	53.3	52.1	52.1
60°	39.7	46.1	46.9	45.2	45.2
62.5°	35.0	41.4	41.4	39.3	39.3
65°	30.7	36.7	35.8	34.1	33.7
67.5°	26.9	32.4	31.1	29.4	29.0
70°	23.0	28.2	26.9	24.7	24.3
72.5°	19.6	24.3	22.6	20.9	20.1
75°	16.2	20.1	19.2	17.1	16.2
77.5°	13.2	16.2	15.4	13.7	12.8
80°	10.2	12.8	12.4	10.7	9.8
82.5°	7.7	9.8	9.4	8.1	6.8
85°	5.1	6.8	6.4	5.5	4.3
87.5°	2.6	4.7	4.3	3.8	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)