

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: P1057881

Luminaire Tested: S122RDR-S290D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057881
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D835-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

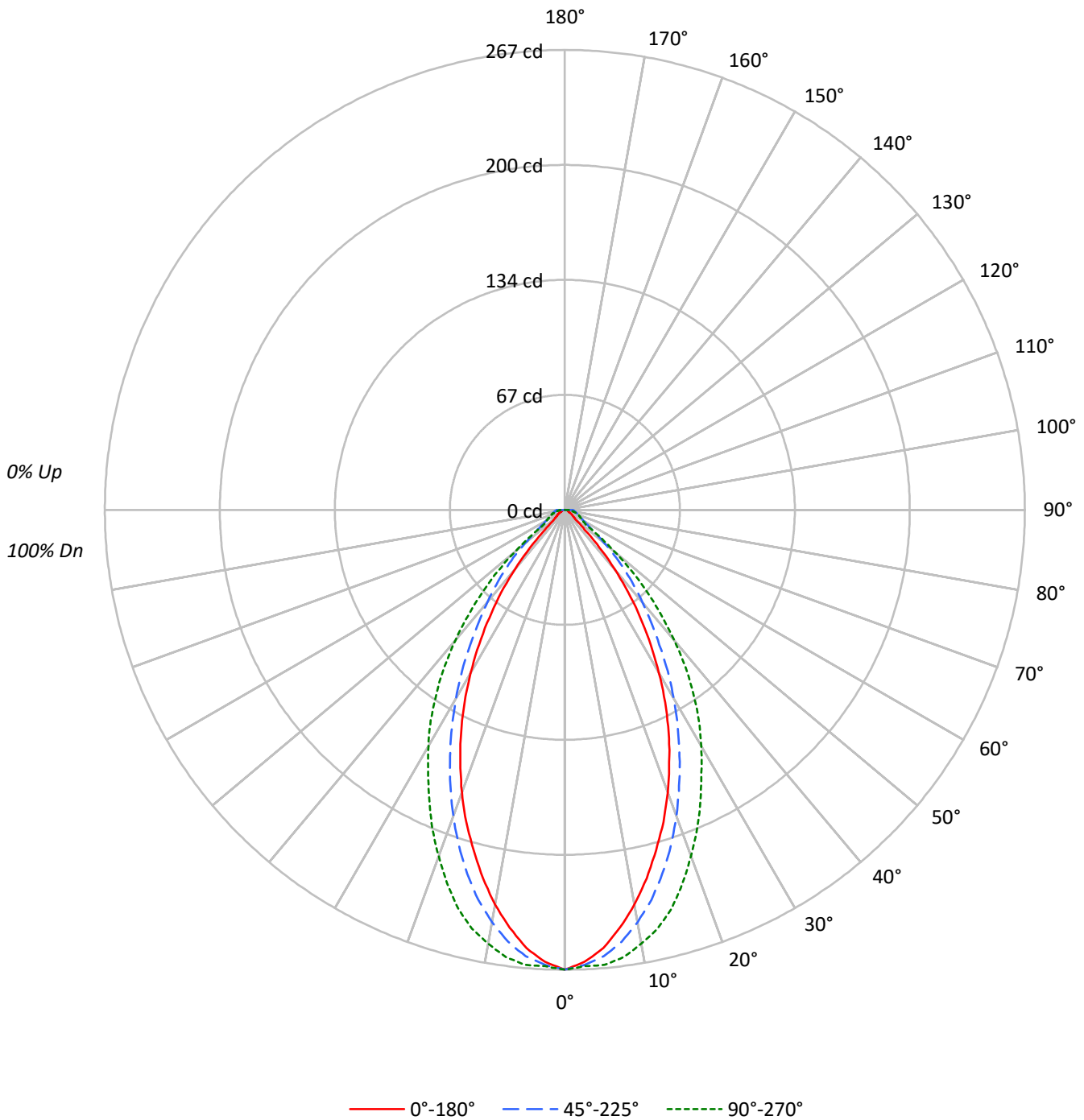
Lumens per Lamp: N/A
Luminaire Lumens: 290.5 lumens
Efficiency: N/A
Efficacy: 23.2 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4925	4925	4925
5°	4731	4818	4912
10°	4362	4553	4793
15°	3909	4178	4577
20°	3431	3715	4202
25°	2903	3209	3791
30°	2329	2693	3375
35°	1721	2156	2924
40°	1079	1686	2377
45°	423	1271	1761
50°	210	858	1079
55°	164	563	479
60°	125	458	443
65°	92	428	428
70°	113	437	437
75°	121	485	456
80°	181	638	499
85°	360	1080	720

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 1988 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.4	8.4
10°-20°	61.6	21.2
20°-30°	73.7	25.4
30°-40°	62.1	21.4
40°-50°	35.3	12.2
50°-60°	13.9	4.8
60°-70°	8.8	3.0
70°-80°	6.5	2.2
80°-90°	4.2	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°	159.8	55.0
0°-40°	221.8	76.3
0°-60°	271.1	93.3
0°-90°	290.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	290.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	267	267	267	267	267	
5°	255	261	260	263	265	24
15°	205	212	219	232	240	57
25°	143	149	158	174	186	65
35°	76	83	96	116	130	47
45°	16	29	49	61	68	15
55°	5	11	18	18	15	5
65°	2	10	10	9	10	2
75°	2	7	7	6	6	2
85°	2	5	5	5	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	266.9	266.9	266.9	266.9	266.9
2.5°	262.7	267.4	264.4	264.8	265.2
5°	255.4	260.9	260.1	263.1	265.2
7.5°	244.7	250.7	252.8	258.0	261.8
10°	232.8	239.6	243.0	251.1	255.8
12.5°	219.1	226.8	231.9	242.2	249.0
15°	204.6	211.8	218.7	231.5	239.6
17.5°	190.1	197.3	204.6	218.7	227.2
20°	174.7	181.5	189.2	204.1	214.0
22.5°	158.4	165.7	173.4	188.8	200.7
25°	142.6	149.1	157.6	173.8	186.2
27.5°	126.0	132.4	141.8	158.4	171.7
30°	109.3	115.7	126.4	143.5	158.4
32.5°	92.7	99.5	111.0	129.8	144.8
35°	76.4	83.3	95.7	116.2	129.8
37.5°	60.6	68.3	82.0	102.1	114.9
40°	44.8	53.8	70.0	88.0	98.7
42.5°	29.9	41.0	58.9	73.9	82.9
45°	16.2	28.6	48.7	61.1	67.5
47.5°	9.0	18.4	38.9	48.7	52.5
50°	7.3	12.8	29.9	37.2	37.6
52.5°	6.0	11.5	22.2	26.5	24.3
55°	5.1	11.1	17.5	17.9	14.9
57.5°	4.3	10.7	14.5	12.8	12.8
60°	3.4	10.7	12.4	11.5	12.0
62.5°	2.6	10.7	11.1	10.2	10.7
65°	2.1	9.8	9.8	9.4	9.8
67.5°	2.1	9.0	9.0	8.5	9.0
70°	2.1	8.5	8.1	8.1	8.1
72.5°	1.7	7.7	7.7	7.3	7.3
75°	1.7	6.8	6.8	6.4	6.4
77.5°	1.7	6.4	6.4	6.0	5.6
80°	1.7	5.6	6.0	5.6	4.7
82.5°	1.7	5.1	5.6	5.1	3.8
85°	1.7	4.7	5.1	4.7	3.4
87.5°	1.3	4.7	4.7	3.8	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)