

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: P1057872

Luminaire Tested: S122RDR-S290D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057872
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-S290D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

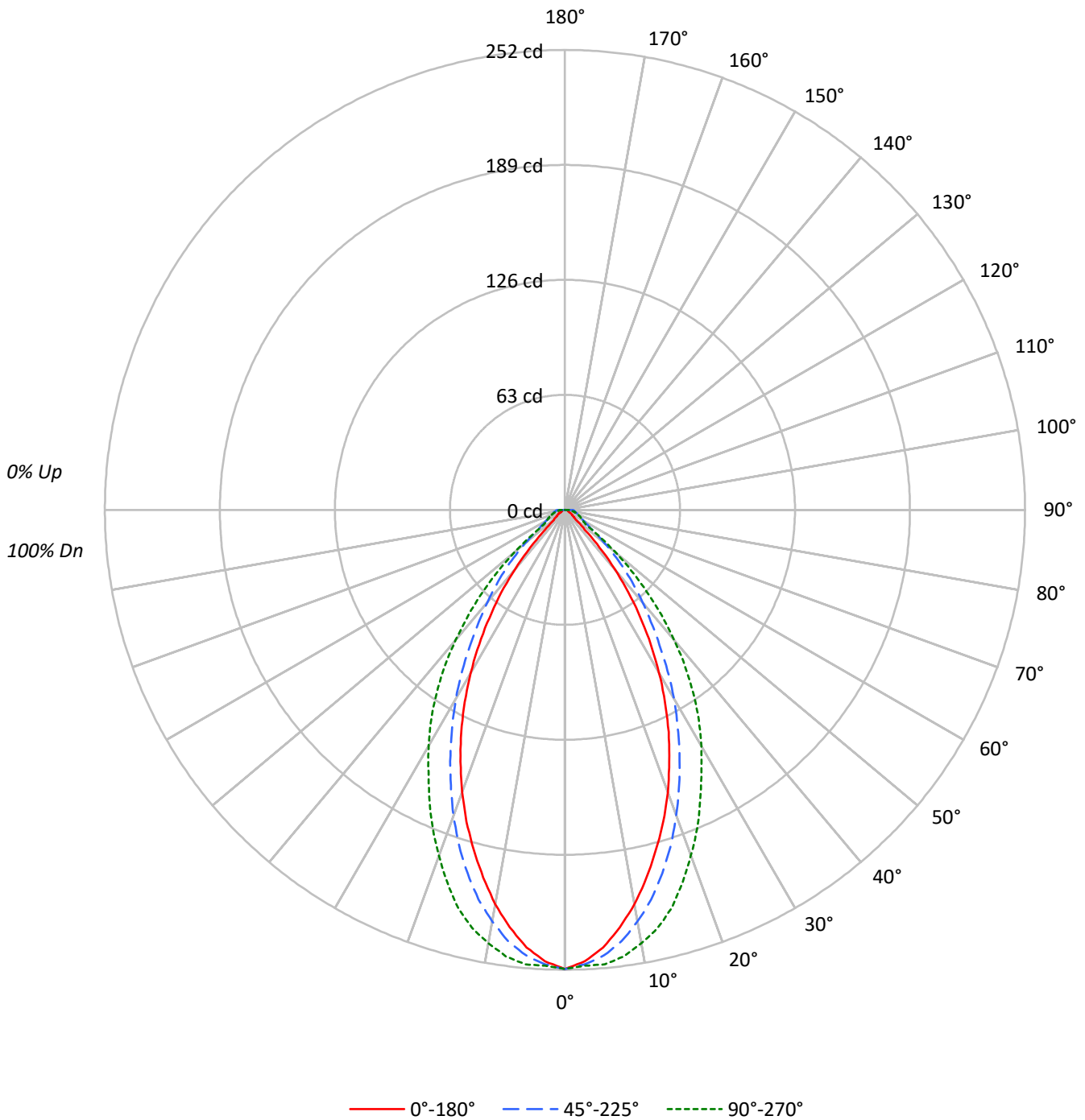
Lumens per Lamp: N/A
Luminaire Lumens: 273.8 lumens
Efficiency: N/A
Efficacy: 21.9 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4643	4643	4643
5°	4458	4540	4631
10°	4111	4291	4518
15°	3683	3937	4314
20°	3232	3501	3961
25°	2736	3023	3573
30°	2197	2540	3181
35°	1624	2032	2757
40°	1019	1590	2240
45°	399	1198	1660
50°	195	810	1016
55°	154	531	454
60°	118	432	417
65°	87	406	406
70°	108	410	410
75°	114	456	428
80°	170	595	468
85°	339	1016	677

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 1861 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.0	8.4
10°-20°	58.1	21.2
20°-30°	69.5	25.4
30°-40°	58.5	21.4
40°-50°	33.3	12.2
50°-60°	13.1	4.8
60°-70°	8.3	3.0
70°-80°	6.1	2.2
80°-90°	3.9	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°	150.6	55.0
0°-40°	209.1	76.4
0°-60°	255.5	93.3
0°-90°	273.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	273.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	252	252	252	252	252	
5°	241	246	245	248	250	22
15°	193	200	206	218	226	54
25°	134	140	148	164	176	61
35°	72	78	90	110	122	45
45°	15	27	46	58	64	14
55°	5	10	16	17	14	4
65°	2	9	9	9	9	2
75°	2	6	6	6	6	2
85°	2	4	5	4	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	251.6	251.6	251.6	251.6	251.6
2.5°	247.6	252.0	249.2	249.6	250.0
5°	240.7	246.0	245.1	248.0	250.0
7.5°	230.7	236.3	238.3	243.1	246.8
10°	219.4	225.8	229.0	236.7	241.1
12.5°	206.5	213.7	218.6	228.2	234.7
15°	192.8	199.7	206.1	218.2	225.8
17.5°	179.1	186.0	192.8	206.1	214.2
20°	164.6	171.1	178.3	192.4	201.7
22.5°	149.3	156.2	163.4	177.9	189.2
25°	134.4	140.5	148.5	163.8	175.5
27.5°	118.7	124.8	133.6	149.3	161.8
30°	103.1	109.1	119.2	135.3	149.3
32.5°	87.4	93.8	104.7	122.4	136.5
35°	72.1	78.5	90.2	109.5	122.4
37.5°	57.2	64.4	77.3	96.2	108.3
40°	42.3	50.7	66.0	82.9	93.0
42.5°	28.2	38.6	55.6	69.6	78.1
45°	15.3	27.0	45.9	57.6	63.6
47.5°	8.5	17.3	36.6	45.9	49.5
50°	6.8	12.1	28.2	35.0	35.4
52.5°	5.6	10.9	20.9	25.0	22.9
55°	4.8	10.5	16.5	16.9	14.1
57.5°	4.0	10.1	13.7	12.1	12.1
60°	3.2	10.1	11.7	10.9	11.3
62.5°	2.4	10.1	10.5	9.7	10.1
65°	2.0	9.3	9.3	8.9	9.3
67.5°	2.0	8.5	8.5	8.1	8.5
70°	2.0	8.1	7.6	7.6	7.6
72.5°	1.6	7.2	7.2	6.8	6.8
75°	1.6	6.4	6.4	6.0	6.0
77.5°	1.6	6.0	6.0	5.6	5.2
80°	1.6	5.2	5.6	5.2	4.4
82.5°	1.6	4.8	5.2	4.8	3.6
85°	1.6	4.4	4.8	4.4	3.2
87.5°	1.2	4.4	4.4	3.6	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)