

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: P1057899

Luminaire Tested: S122RDR-S290D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057899
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-S290D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

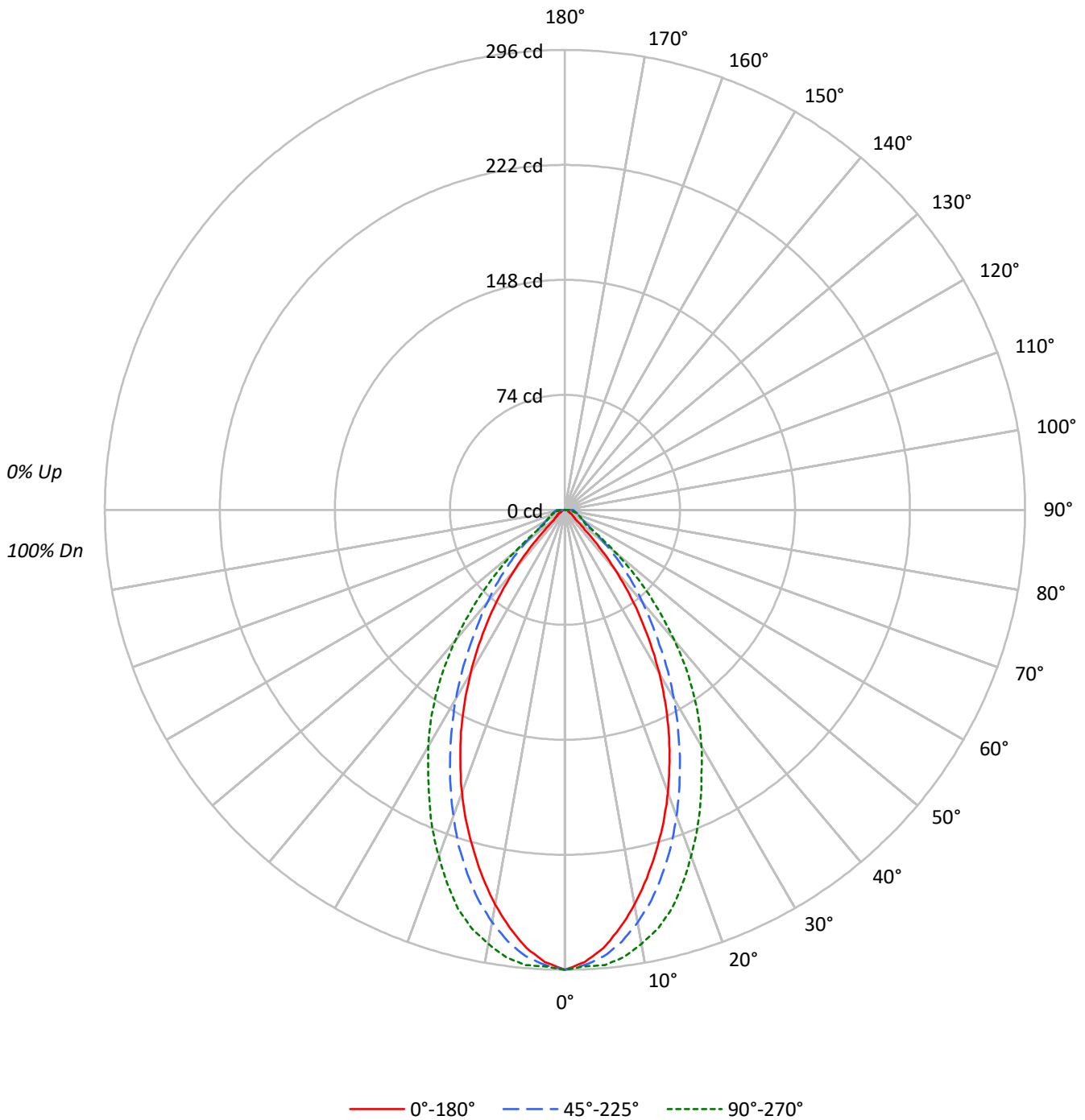
Lumens per Lamp: N/A
Luminaire Lumens: 322.2 lumens
Efficiency: N/A
Efficacy: 25.8 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	76	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°	5462	5462	5462
5°	5246	5342	5448
10°	4836	5050	5316
15°	4335	4633	5076
20°	3804	4120	4660
25°	3221	3559	4204
30°	2582	2987	3744
35°	1910	2390	3244
40°	1197	1872	2635
45°	470	1409	1952
50°	233	953	1197
55°	183	624	534
60°	140	506	491
65°	105	476	476
70°	129	486	486
75°	135	542	506
80°	202	701	553
85°	402	1207	805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 2200 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.0	8.4
10°-20°	68.4	21.2
20°-30°	81.8	25.4
30°-40°	68.8	21.4
40°-50°	39.2	12.2
50°-60°	15.5	4.8
60°-70°	9.7	3.0
70°-80°	7.2	2.2
80°-90°	4.6	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°	177.2	55.0
0°-40°	246.0	76.3
0°-60°	300.6	93.3
0°-90°	322.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	322.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	296	296	296	296	296	
5°	283	289	288	292	294	26
15°	227	235	242	257	266	63
25°	158	165	175	193	206	72
35°	85	92	106	129	144	53
45°	18	32	54	68	75	17
55°	6	12	19	20	17	5
65°	2	11	11	10	11	3
75°	2	8	8	7	7	2
85°	2	5	6	5	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	296.0	296.0	296.0	296.0	296.0
2.5°	291.3	296.5	293.2	293.7	294.1
5°	283.2	289.4	288.4	291.8	294.1
7.5°	271.4	278.0	280.4	286.1	290.3
10°	258.1	265.7	269.5	278.5	283.7
12.5°	243.0	251.5	257.2	268.5	276.1
15°	226.9	234.9	242.5	256.7	265.7
17.5°	210.8	218.8	226.9	242.5	252.0
20°	193.7	201.3	209.8	226.4	237.3
22.5°	175.7	183.8	192.3	209.3	222.6
25°	158.2	165.3	174.8	192.8	206.5
27.5°	139.7	146.8	157.2	175.7	190.4
30°	121.2	128.4	140.2	159.1	175.7
32.5°	102.8	110.4	123.1	144.0	160.6
35°	84.8	92.4	106.1	128.8	144.0
37.5°	67.3	75.8	90.9	113.2	127.4
40°	49.7	59.7	77.7	97.6	109.4
42.5°	33.2	45.5	65.4	81.9	91.9
45°	18.0	31.7	54.0	67.7	74.8
47.5°	9.9	20.4	43.1	54.0	58.3
50°	8.1	14.2	33.2	41.2	41.7
52.5°	6.6	12.8	24.6	29.4	27.0
55°	5.7	12.3	19.4	19.9	16.6
57.5°	4.7	11.8	16.1	14.2	14.2
60°	3.8	11.8	13.7	12.8	13.3
62.5°	2.8	11.8	12.3	11.4	11.8
65°	2.4	10.9	10.9	10.4	10.9
67.5°	2.4	9.9	9.9	9.5	9.9
70°	2.4	9.5	9.0	9.0	9.0
72.5°	1.9	8.5	8.5	8.1	8.1
75°	1.9	7.6	7.6	7.1	7.1
77.5°	1.9	7.1	7.1	6.6	6.2
80°	1.9	6.2	6.6	6.2	5.2
82.5°	1.9	5.7	6.2	5.7	4.3
85°	1.9	5.2	5.7	5.2	3.8
87.5°	1.4	5.2	5.2	4.3	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)