

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: P1057885

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057885
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
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-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

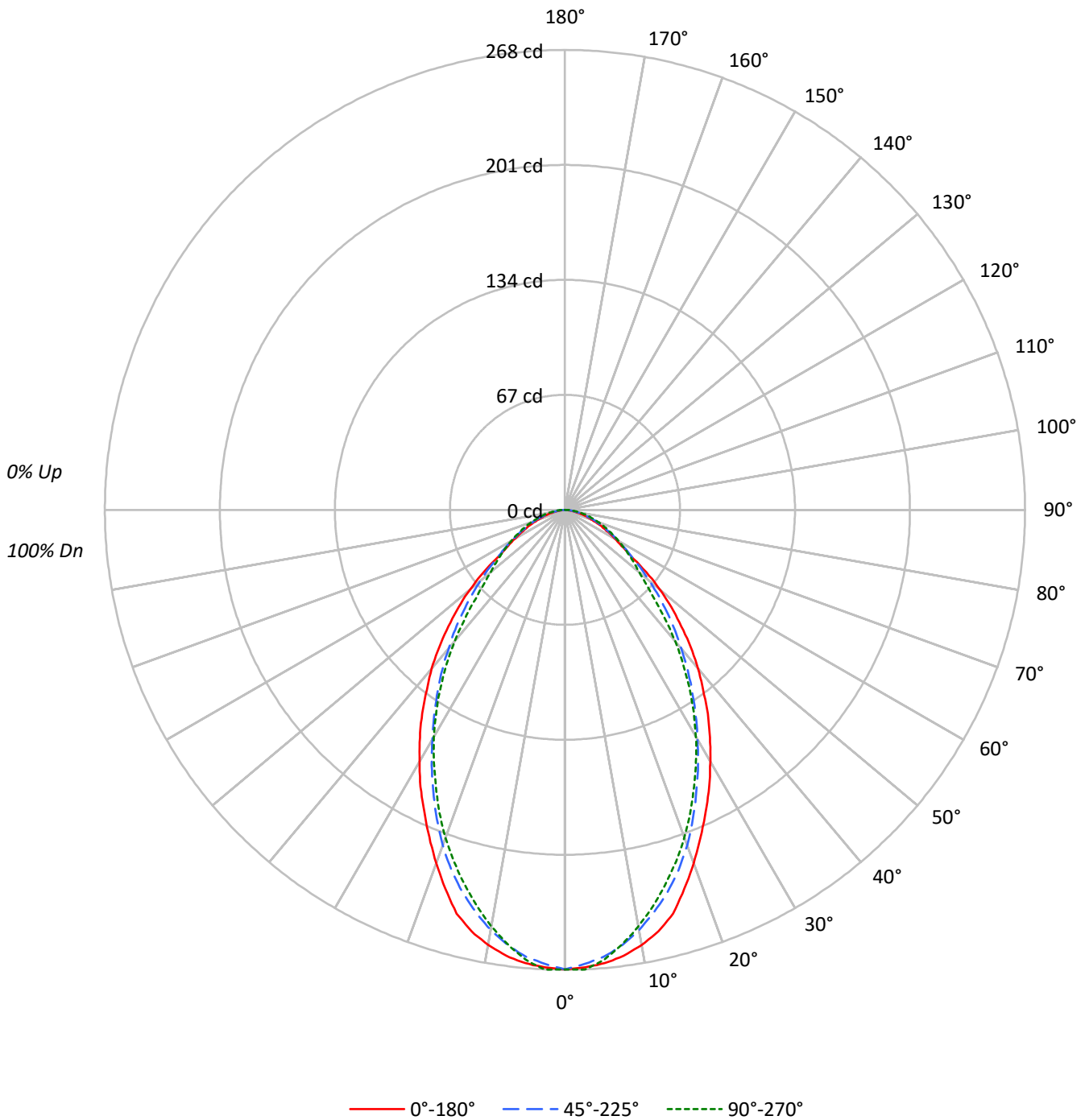
Lumens per Lamp: N/A
Luminaire Lumens: 406.7 lumens
Efficiency: N/A
Efficacy: 32.5 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4942	4942	4942
5°	4912	4842	4873
10°	4825	4658	4619
15°	4652	4407	4317
20°	4304	4086	3994
25°	3950	3689	3620
30°	3607	3290	3251
35°	3266	2910	2843
40°	2907	2536	2404
45°	2503	2182	1926
50°	2070	1837	1616
55°	1496	1522	1454
60°	1244	1306	1321
65°	1061	1135	1209
70°	874	1014	1106
75°	727	848	1005
80°	542	680	903
85°	191	360	805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2503 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.7	6.1
10°-20°	65.2	16.0
20°-30°	84.4	20.7
30°-40°	82.7	20.3
40°-50°	65.2	16.0
50°-60°	42.7	10.5
60°-70°	26.0	6.4
70°-80°	13.0	3.2
80°-90°	2.8	0.7
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°	174.3	42.9
0°-40°	257.0	63.2
0°-60°	364.9	89.7
0°-90°	406.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	406.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	268	268	268	268	268	
5°	265	265	261	263	263	25
15°	244	240	231	228	226	68
25°	194	188	181	180	178	89
35°	145	137	129	129	126	90
45°	96	90	84	78	74	74
55°	46	49	47	46	45	44
65°	24	25	26	27	28	24
75°	10	11	12	14	14	11
85°	1	1	2	3	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	267.8	267.8	267.8	267.8	267.8
2.5°	266.9	267.3	264.8	267.3	268.2
5°	265.2	265.2	261.4	263.1	263.1
7.5°	262.2	261.8	255.8	255.8	255.4
10°	257.5	255.8	248.6	247.3	246.5
12.5°	251.6	248.6	240.1	237.9	236.6
15°	243.5	240.1	230.7	227.7	226.0
17.5°	231.5	228.1	220.0	216.6	214.9
20°	219.2	214.0	208.1	205.1	203.4
22.5°	206.4	200.4	194.9	192.7	191.0
25°	194.0	187.6	181.2	180.4	177.8
27.5°	182.1	174.4	168.0	167.6	165.4
30°	169.3	161.2	154.4	154.8	152.6
32.5°	157.3	149.7	141.6	142.0	139.4
35°	145.0	136.9	129.2	128.8	126.2
37.5°	132.2	124.5	117.3	115.6	113.0
40°	120.7	113.0	105.3	102.3	99.8
42.5°	108.3	101.5	94.7	90.0	86.6
45°	95.9	90.0	83.6	77.6	73.8
47.5°	84.0	79.3	73.8	66.5	64.0
50°	72.1	68.6	64.0	57.6	56.3
52.5°	59.7	58.4	55.4	51.2	50.7
55°	46.5	49.0	47.3	45.6	45.2
57.5°	39.2	39.7	40.9	40.5	40.5
60°	33.7	33.7	35.4	35.8	35.8
62.5°	28.6	29.0	30.7	31.6	31.6
65°	24.3	24.7	26.0	27.3	27.7
67.5°	20.0	20.9	22.2	23.5	23.9
70°	16.2	17.1	18.8	20.0	20.5
72.5°	13.2	13.6	15.4	16.6	17.1
75°	10.2	10.7	11.9	13.6	14.1
77.5°	7.2	8.1	9.4	10.7	11.5
80°	5.1	5.5	6.4	8.1	8.5
82.5°	3.0	3.4	4.3	5.5	6.0
85°	0.9	1.3	1.7	3.0	3.8
87.5°	0.0	0.0	0.0	0.9	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)