

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: P1057831

Luminaire Tested: S122RDR-S1005D927-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057831
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-S1005D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

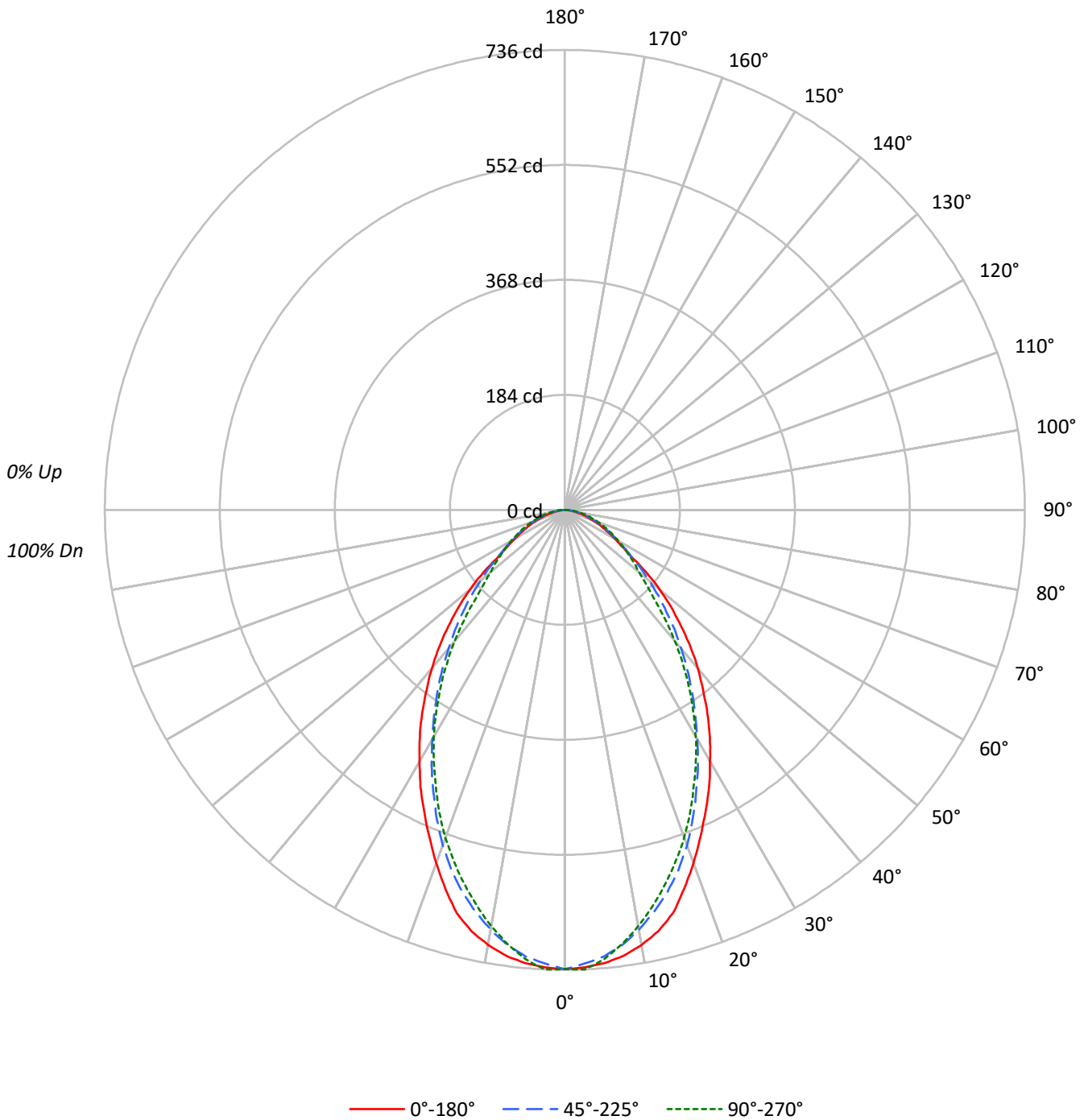
Lumens per Lamp: N/A
Luminaire Lumens: 1116.3 lumens
Efficiency: N/A
Efficacy: 26.7 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88			88	
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77			77	
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68			68	
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61			61	
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54			54	
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49			49	
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44			44	
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41			41	
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37			37	
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34			34	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13563	13563	13563
5°	13485	13288	13375
10°	13245	12784	12676
15°	12767	12096	11850
20°	11813	11215	10963
25°	10842	10127	9938
30°	9899	9028	8928
35°	8963	7988	7803
40°	7978	6964	6598
45°	6871	5986	5284
50°	5678	5041	4435
55°	4105	4179	3992
60°	3414	3583	3628
65°	2912	3117	3323
70°	2401	2778	3032
75°	2003	2338	2752
80°	1488	1870	2487
85°	487	995	2223

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6871 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.9	6.1
10°-20°	178.9	16.0
20°-30°	231.6	20.7
30°-40°	227.1	20.3
40°-50°	178.8	16.0
50°-60°	117.2	10.5
60°-70°	71.4	6.4
70°-80°	35.7	3.2
80°-90°	7.7	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°	478.4	42.9
0°-40°	705.5	63.2
0°-60°	1001.6	89.7
0°-90°	1116.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1116.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	735	735	735	735	735	
5°	728	728	717	722	722	69
15°	668	659	633	625	620	186
25°	532	515	497	495	488	245
35°	398	376	355	354	346	248
45°	263	247	229	213	202	203
55°	128	135	130	125	124	121
65°	67	68	71	75	76	66
75°	28	29	33	38	39	30
85°	2	4	5	8	10	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	735.0	735.0	735.0	735.0	735.0
2.5°	732.7	733.8	726.8	733.8	736.2
5°	728.0	728.0	717.4	722.1	722.1
7.5°	719.8	718.6	702.2	702.2	701.1
10°	706.9	702.2	682.3	678.8	676.5
12.5°	690.5	682.3	658.9	653.1	649.6
15°	668.3	658.9	633.2	625.0	620.3
17.5°	635.5	626.2	603.9	594.6	589.9
20°	601.6	587.5	571.1	563.0	558.3
22.5°	566.5	550.1	534.9	529.0	524.3
25°	532.5	515.0	497.4	495.1	488.1
27.5°	499.8	478.7	461.1	460.0	454.1
30°	464.6	442.4	423.7	424.9	419.0
32.5°	431.9	410.8	388.6	389.7	382.7
35°	397.9	375.7	354.6	353.5	346.4
37.5°	362.8	341.8	321.9	317.2	310.2
40°	331.2	310.2	289.1	280.9	273.9
42.5°	297.3	278.6	259.8	247.0	237.6
45°	263.3	247.0	229.4	213.0	202.5
47.5°	230.6	217.7	202.5	182.6	175.6
50°	197.8	188.4	175.6	158.0	154.5
52.5°	163.9	160.3	152.2	140.4	139.3
55°	127.6	134.6	129.9	125.2	124.1
57.5°	107.7	108.8	112.4	111.2	111.2
60°	92.5	92.5	97.1	98.3	98.3
62.5°	78.4	79.6	84.3	86.6	86.6
65°	66.7	67.9	71.4	74.9	76.1
67.5°	55.0	57.3	60.9	64.4	65.5
70°	44.5	46.8	51.5	55.0	56.2
72.5°	36.3	37.5	42.1	45.6	46.8
75°	28.1	29.3	32.8	37.5	38.6
77.5°	19.9	22.2	25.7	29.3	31.6
80°	14.0	15.2	17.6	22.2	23.4
82.5°	8.2	9.4	11.7	15.2	16.4
85°	2.3	3.5	4.7	8.2	10.5
87.5°	0.0	0.0	0.0	2.3	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)