

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: P1058002

Luminaire Tested: S122RDR-S485D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058002
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-S485D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

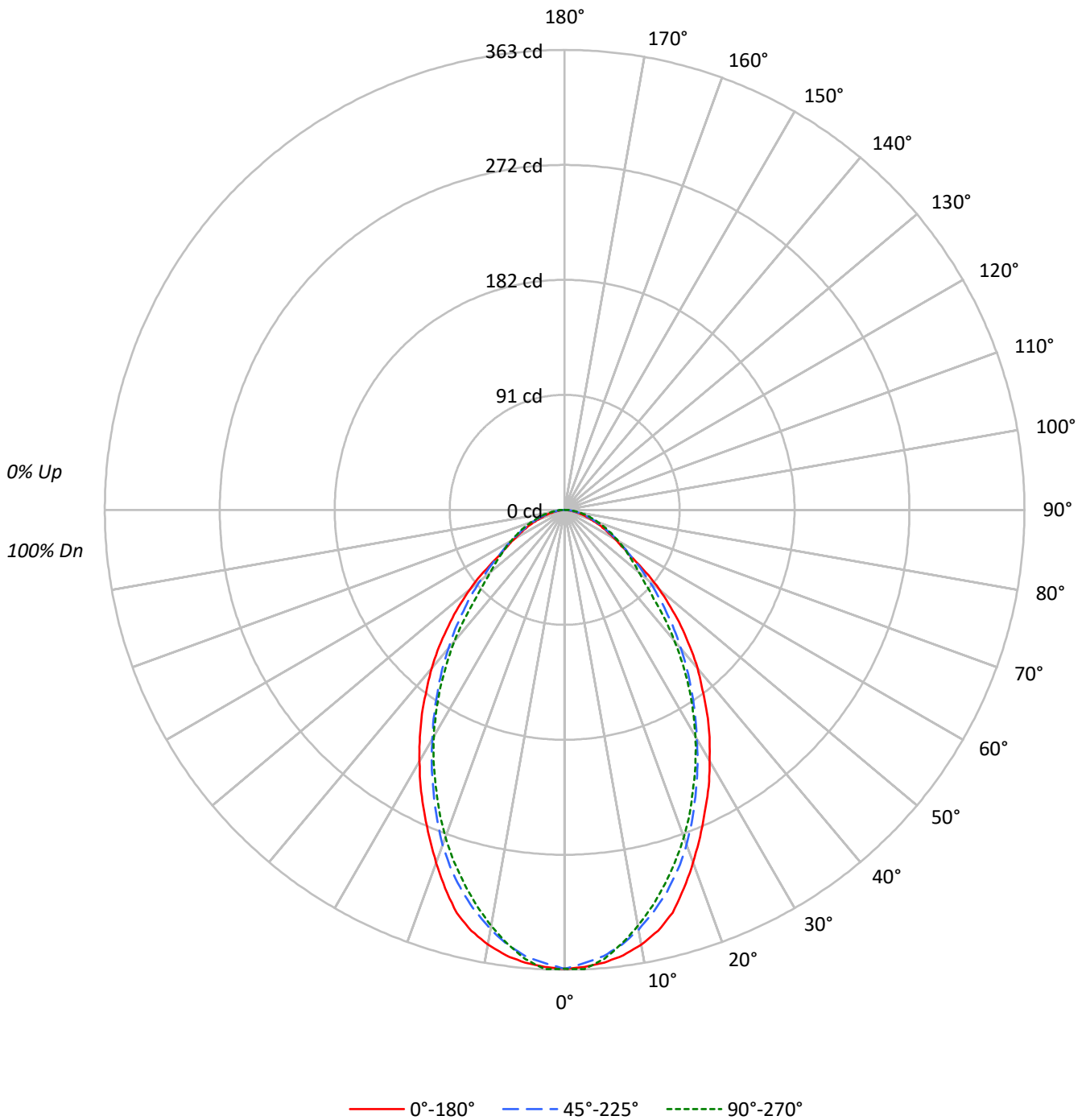
Lumens per Lamp: N/A
Luminaire Lumens: 550.1 lumens
Efficiency: N/A
Efficacy: 28.1 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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				
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°	6683	6683	6683
5°	6644	6550	6592
10°	6528	6301	6247
15°	6291	5960	5840
20°	5822	5528	5402
25°	5342	4990	4897
30°	4879	4449	4400
35°	4417	3938	3845
40°	3931	3433	3252
45°	3387	2949	2604
50°	2799	2483	2185
55°	2024	2059	1966
60°	1683	1768	1786
65°	1436	1537	1637
70°	1182	1370	1494
75°	984	1148	1355
80°	733	924	1222
85°	254	487	1101

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3387 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.5	6.1
10°-20°	88.2	16.0
20°-30°	114.1	20.7
30°-40°	111.9	20.3
40°-50°	88.1	16.0
50°-60°	57.8	10.5
60°-70°	35.2	6.4
70°-80°	17.6	3.2
80°-90°	3.8	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°	235.8	42.9
0°-40°	347.7	63.2
0°-60°	493.6	89.7
0°-90°	550.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	550.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	362	362	362	362	362	
5°	359	359	354	356	356	34
15°	329	325	312	308	306	92
25°	262	254	245	244	240	121
35°	196	185	175	174	171	122
45°	130	122	113	105	100	100
55°	63	66	64	62	61	60
65°	33	34	35	37	38	33
75°	14	14	16	18	19	15
85°	1	2	2	4	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	362.2	362.2	362.2	362.2	362.2
2.5°	361.1	361.6	358.2	361.6	362.8
5°	358.7	358.7	353.6	355.9	355.9
7.5°	354.7	354.1	346.1	346.1	345.5
10°	348.4	346.1	336.3	334.5	333.4
12.5°	340.3	336.3	324.7	321.8	320.1
15°	329.3	324.7	312.0	308.0	305.7
17.5°	313.2	308.6	297.6	293.0	290.7
20°	296.5	289.5	281.5	277.4	275.1
22.5°	279.2	271.1	263.6	260.7	258.4
25°	262.4	253.8	245.1	244.0	240.5
27.5°	246.3	235.9	227.2	226.7	223.8
30°	229.0	218.0	208.8	209.4	206.5
32.5°	212.8	202.4	191.5	192.1	188.6
35°	196.1	185.1	174.8	174.2	170.7
37.5°	178.8	168.4	158.6	156.3	152.8
40°	163.2	152.8	142.5	138.4	135.0
42.5°	146.5	137.3	128.0	121.7	117.1
45°	129.8	121.7	113.0	105.0	99.8
47.5°	113.6	107.3	99.8	90.0	86.5
50°	97.5	92.9	86.5	77.9	76.1
52.5°	80.7	79.0	75.0	69.2	68.6
55°	62.9	66.3	64.0	61.7	61.1
57.5°	53.1	53.6	55.4	54.8	54.8
60°	45.6	45.6	47.9	48.4	48.4
62.5°	38.6	39.2	41.5	42.7	42.7
65°	32.9	33.5	35.2	36.9	37.5
67.5°	27.1	28.3	30.0	31.7	32.3
70°	21.9	23.1	25.4	27.1	27.7
72.5°	17.9	18.5	20.8	22.5	23.1
75°	13.8	14.4	16.1	18.5	19.0
77.5°	9.8	11.0	12.7	14.4	15.6
80°	6.9	7.5	8.7	11.0	11.5
82.5°	4.0	4.6	5.8	7.5	8.1
85°	1.2	1.7	2.3	4.0	5.2
87.5°	0.0	0.0	0.0	1.2	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)