

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: P1058011

Luminaire Tested: S122RDR-S485D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058011
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-S485D935-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, 90 CRI LEDS
Ballast/Driver: -

Summary

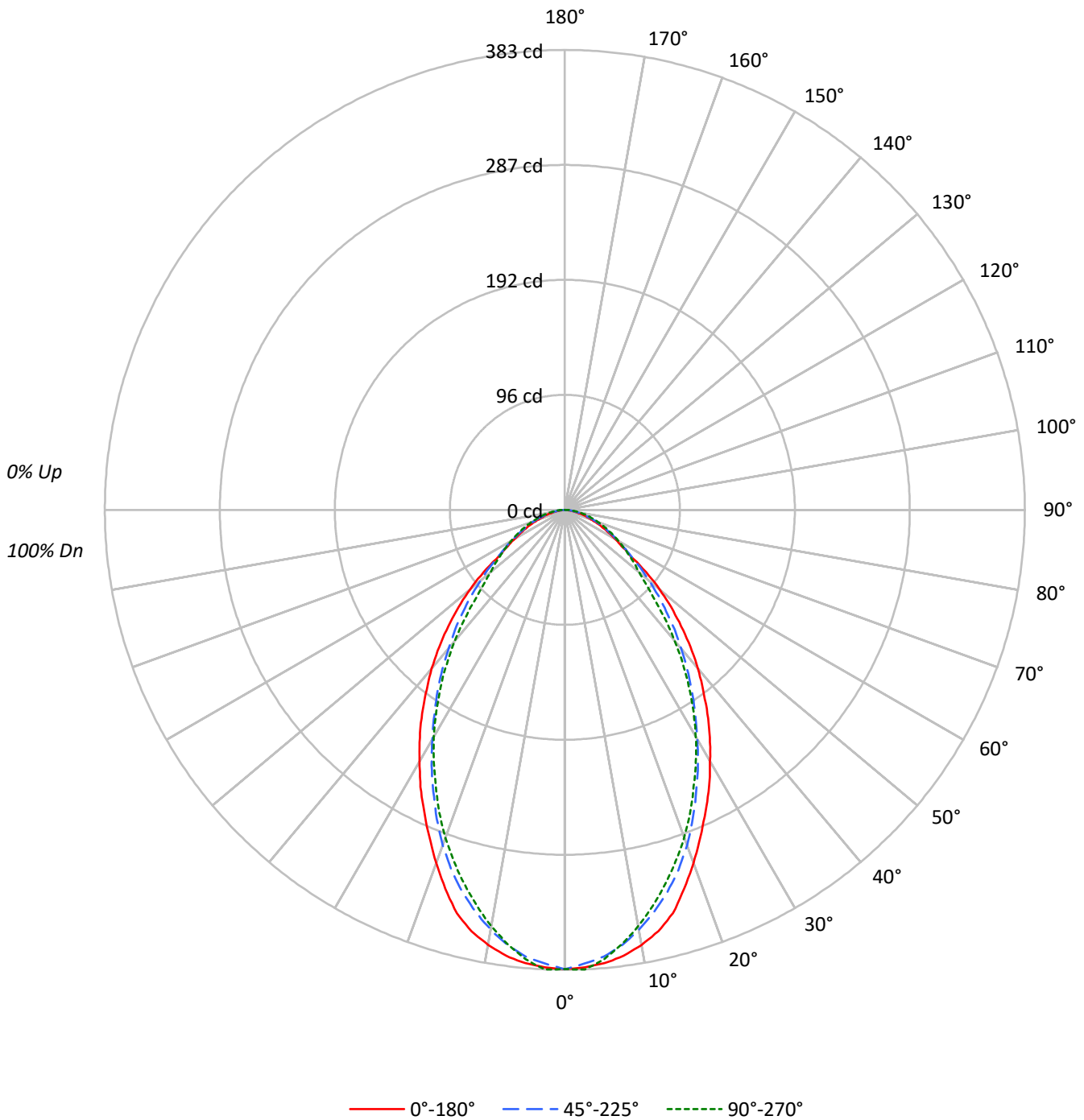
Lumens per Lamp: N/A
Luminaire Lumens: 580.9 lumens
Efficiency: N/A
Efficacy: 29.6 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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°	7058	7058	7058
5°	7018	6916	6961
10°	6893	6654	6597
15°	6644	6295	6167
20°	6148	5836	5704
25°	5642	5271	5171
30°	5152	4698	4647
35°	4665	4158	4061
40°	4153	3623	3433
45°	3575	3116	2750
50°	2954	2624	2308
55°	2136	2175	2078
60°	1775	1867	1890
65°	1515	1624	1729
70°	1246	1446	1575
75°	1041	1219	1433
80°	776	967	1296
85°	254	508	1164

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3575 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.4	6.1
10°-20°	93.1	16.0
20°-30°	120.5	20.7
30°-40°	118.2	20.3
40°-50°	93.1	16.0
50°-60°	61.0	10.5
60°-70°	37.1	6.4
70°-80°	18.6	3.2
80°-90°	4.0	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°	249.0	42.9
0°-40°	367.2	63.2
0°-60°	521.2	89.7
0°-90°	580.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	580.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	382	382	382	382	382	
5°	379	379	373	376	376	36
15°	348	343	330	325	323	97
25°	277	268	259	258	254	127
35°	207	196	185	184	180	129
45°	137	128	119	111	105	106
55°	66	70	68	65	65	63
65°	35	35	37	39	40	35
75°	15	15	17	20	20	16
85°	1	2	2	4	6	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	382.5	382.5	382.5	382.5	382.5
2.5°	381.3	381.9	378.2	381.9	383.1
5°	378.9	378.9	373.4	375.8	375.8
7.5°	374.6	374.0	365.5	365.5	364.8
10°	367.9	365.5	355.1	353.3	352.1
12.5°	359.4	355.1	342.9	339.9	338.0
15°	347.8	342.9	329.5	325.3	322.8
17.5°	330.7	325.9	314.3	309.4	307.0
20°	313.1	305.8	297.2	293.0	290.5
22.5°	294.8	286.3	278.4	275.3	272.9
25°	277.1	268.0	258.9	257.6	254.0
27.5°	260.1	249.1	240.0	239.4	236.3
30°	241.8	230.2	220.5	221.1	218.1
32.5°	224.8	213.8	202.2	202.8	199.2
35°	207.1	195.5	184.6	183.9	180.3
37.5°	188.8	177.9	167.5	165.1	161.4
40°	172.4	161.4	150.4	146.2	142.5
42.5°	154.7	145.0	135.2	128.5	123.6
45°	137.0	128.5	119.4	110.9	105.4
47.5°	120.0	113.3	105.4	95.0	91.4
50°	102.9	98.1	91.4	82.2	80.4
52.5°	85.3	83.4	79.2	73.1	72.5
55°	66.4	70.0	67.6	65.2	64.6
57.5°	56.0	56.6	58.5	57.9	57.9
60°	48.1	48.1	50.6	51.2	51.2
62.5°	40.8	41.4	43.9	45.1	45.1
65°	34.7	35.3	37.2	39.0	39.6
67.5°	28.6	29.8	31.7	33.5	34.1
70°	23.1	24.4	26.8	28.6	29.2
72.5°	18.9	19.5	21.9	23.8	24.4
75°	14.6	15.2	17.1	19.5	20.1
77.5°	10.4	11.6	13.4	15.2	16.4
80°	7.3	7.9	9.1	11.6	12.2
82.5°	4.3	4.9	6.1	7.9	8.5
85°	1.2	1.8	2.4	4.3	5.5
87.5°	0.0	0.0	0.0	1.2	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)