

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: P1058019

Luminaire Tested: S122RDR-S485D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058019
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D940-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

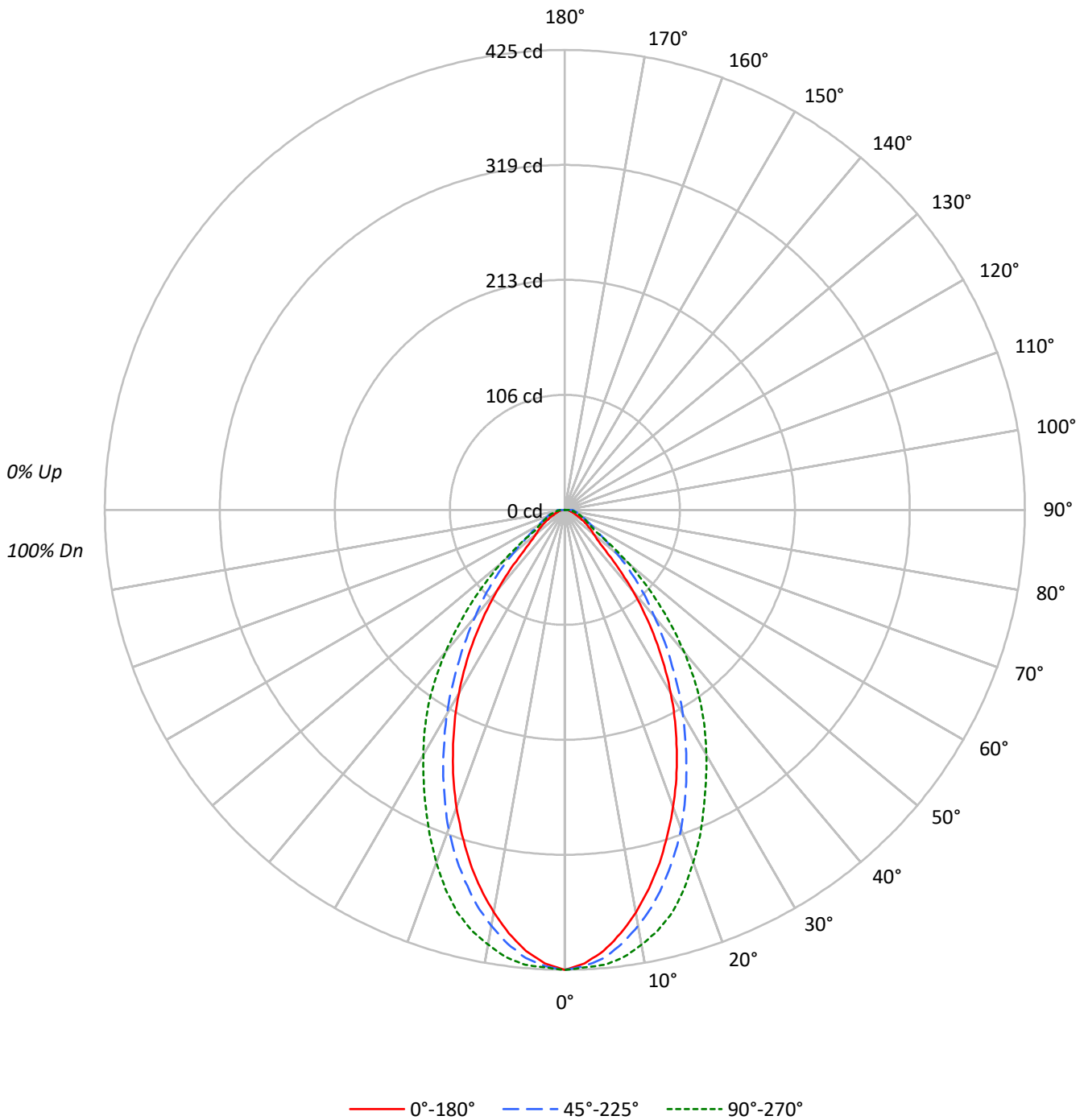
Lumens per Lamp: N/A
Luminaire Lumens: 515.7 lumens
Efficiency: N/A
Efficacy: 26.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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				100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7844	7844	7844
5°	7581	7700	7817
10°	7079	7315	7647
15°	6457	6793	7349
20°	5744	6166	6810
25°	4978	5414	6185
30°	4172	4643	5572
35°	3287	3843	4938
40°	2344	3105	4124
45°	1386	2456	3199
50°	996	1777	2176
55°	833	1280	1097
60°	675	1026	934
65°	550	908	856
70°	475	885	820
75°	449	898	813
80°	468	1073	871
85°	677	1736	1080

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3199 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	7.6
10°-20°	100.2	19.4
20°-30°	123.6	24.0
30°-40°	109.9	21.3
40°-50°	70.2	13.6
50°-60°	33.7	6.5
60°-70°	19.8	3.8
70°-80°	12.6	2.4
80°-90°	6.7	1.3
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°	262.8	51.0
0°-40°	372.7	72.3
0°-60°	476.5	92.4
0°-90°	515.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	515.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	425	425	425	425	425	
5°	409	417	416	418	422	38
15°	338	346	356	372	385	94
25°	244	254	266	285	304	112
35°	146	157	171	196	219	91
45°	53	69	94	109	123	45
55°	26	34	40	38	34	23
65°	13	23	21	19	20	13
75°	6	14	13	12	11	7
85°	3	8	8	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	425.1	425.1	425.1	425.1	425.1
2.5°	419.5	426.4	422.0	422.0	423.2
5°	409.3	416.9	415.7	418.2	422.0
7.5°	394.8	403.0	404.3	411.2	416.9
10°	377.8	386.6	390.4	400.5	408.1
12.5°	358.8	367.7	374.6	387.2	398.0
15°	338.0	346.2	355.6	372.1	384.7
17.5°	315.2	326.0	335.4	352.5	367.0
20°	292.5	302.6	314.0	330.4	346.8
22.5°	269.1	278.6	290.0	307.0	326.0
25°	244.5	253.9	265.9	284.9	303.8
27.5°	220.5	229.9	241.3	262.2	282.4
30°	195.8	205.3	217.9	239.4	261.5
32.5°	171.2	181.3	193.9	217.3	240.7
35°	145.9	157.3	170.6	196.5	219.2
37.5°	121.3	132.7	149.1	174.4	195.8
40°	97.3	110.5	128.9	151.6	171.2
42.5°	73.9	88.4	111.2	129.5	146.6
45°	53.1	68.9	94.1	109.3	122.6
47.5°	40.4	51.8	77.7	89.7	99.2
50°	34.7	41.7	61.9	70.8	75.8
52.5°	30.3	36.6	49.3	53.7	53.7
55°	25.9	33.5	39.8	38.5	34.1
57.5°	22.1	30.3	32.8	27.8	29.1
60°	18.3	27.8	27.8	24.6	25.3
62.5°	15.2	25.9	24.0	21.5	22.1
65°	12.6	22.7	20.8	19.0	19.6
67.5°	10.1	20.2	18.3	17.1	17.1
70°	8.8	18.3	16.4	15.2	15.2
72.5°	7.6	15.8	14.5	13.3	13.3
75°	6.3	13.9	12.6	12.0	11.4
77.5°	5.7	12.0	11.4	10.1	9.5
80°	4.4	10.1	10.1	9.5	8.2
82.5°	3.8	8.8	8.8	8.2	6.9
85°	3.2	7.6	8.2	6.9	5.1
87.5°	2.5	6.9	6.9	5.7	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)