

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 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: S122RDRP-S485D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S122RDRP-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

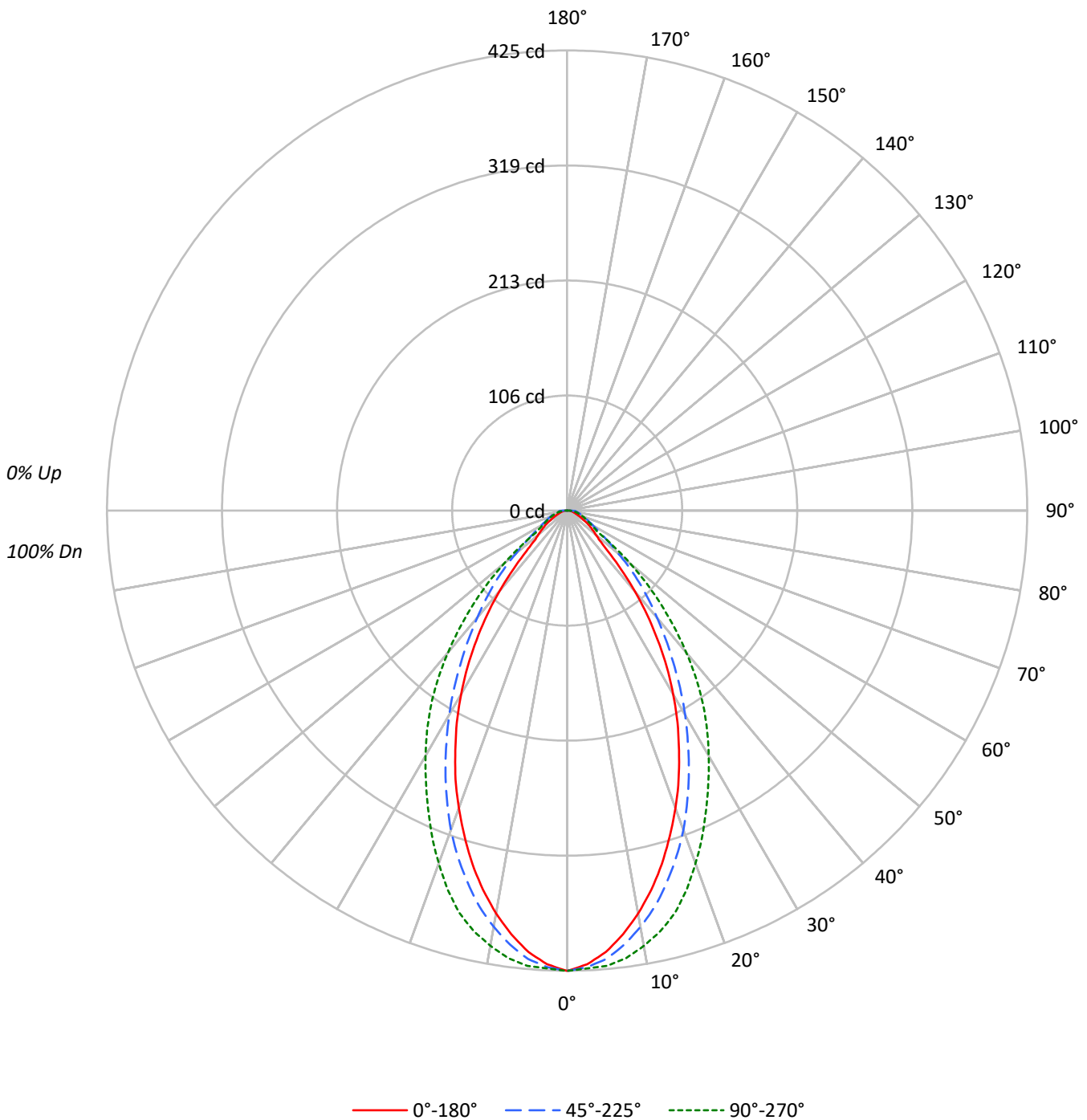
Lumens per Lamp: N/A
Luminaire Lumens: 515.7 lumens
Efficiency: N/A
Efficacy: 26.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	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



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	8.82	10.10	9.19	10.41	10.73	8.62	9.90	8.99	10.21	10.52
	3H	10.05	11.19	10.43	11.52	11.88	10.22	11.35	10.60	11.68	12.05
	4H	10.51	11.57	10.91	11.92	12.30	10.94	12.00	11.34	12.35	12.73
	6H	10.89	11.86	11.30	12.23	12.63	11.59	12.56	12.00	12.93	13.33
	8H	11.04	11.96	11.47	12.36	12.76	11.91	12.84	12.34	13.23	13.63
	12H	11.20	12.08	11.64	12.47	12.90	12.21	13.09	12.64	13.48	13.91
4H	2H	9.37	10.43	9.77	10.78	11.16	9.21	10.27	9.61	10.62	11.00
	3H	11.07	11.94	11.48	12.34	12.74	11.05	11.92	11.47	12.33	12.73
	4H	11.86	12.64	12.30	13.06	13.51	11.93	12.71	12.36	13.13	13.57
	6H	12.51	13.18	12.97	13.63	14.10	12.77	13.45	13.24	13.90	14.36
	8H	12.75	13.39	13.22	13.83	14.31	13.19	13.83	13.66	14.27	14.74
	12H	13.00	13.56	13.49	14.05	14.52	13.59	14.15	14.08	14.64	15.11
8H	4H	12.28	12.91	12.75	13.36	13.83	12.34	12.98	12.81	13.42	13.90
	6H	13.26	13.78	13.76	14.27	14.76	13.43	13.95	13.93	14.45	14.93
	8H	13.75	14.21	14.27	14.73	15.22	14.02	14.48	14.54	15.00	15.49
	12H	14.25	14.67	14.77	15.16	15.73	14.62	15.03	15.13	15.53	16.10
12H	4H	12.35	12.91	12.83	13.39	13.87	12.42	12.98	12.91	13.46	13.94
	6H	13.43	13.89	13.95	14.41	14.90	13.59	14.06	14.11	14.58	15.07
	8H	14.06	14.47	14.57	14.97	15.54	14.30	14.71	14.82	15.21	15.78