

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: P1058096

Luminaire Tested: S122RDRP-S675D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058096
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D940-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

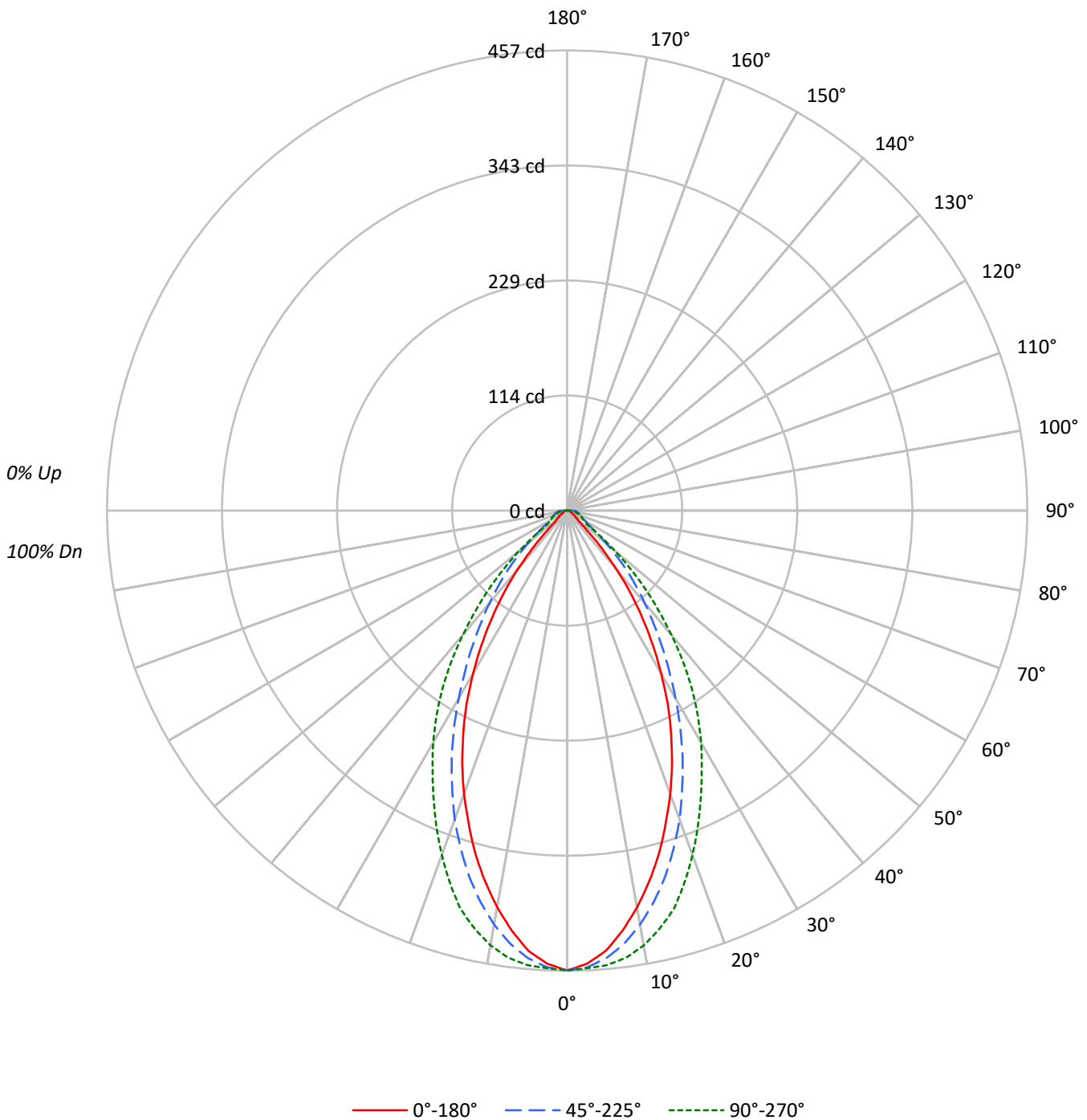
Lumens per Lamp: N/A
Luminaire Lumens: 492.2 lumens
Efficiency: N/A
Efficacy: 19.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8425	8425	8425
5°	8133	8263	8393
10°	7491	7819	8212
15°	6734	7185	7821
20°	5875	6407	7146
25°	4970	5522	6393
30°	3970	4585	5666
35°	2935	3685	4868
40°	1855	2886	3878
45°	731	2169	2852
50°	376	1455	1757
55°	309	955	788
60°	225	775	709
65°	192	725	725
70°	189	755	707
75°	250	870	749
80°	372	1116	839
85°	550	1842	1101

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 3680 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.8	8.5
10°-20°	105.5	21.4
20°-30°	125.4	25.5
30°-40°	104.3	21.2
40°-50°	58.2	11.8
50°-60°	23.5	4.8
60°-70°	15.0	3.1
70°-80°	11.3	2.3
80°-90°	7.2	1.5
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°	272.6	55.4
0°-40°	376.9	76.6
0°-60°	458.7	93.2
0°-90°	492.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	492.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	457	457	457	457	457	
5°	439	447	446	450	453	41
15°	352	363	376	395	409	98
25°	244	254	271	292	314	111
35°	130	143	164	191	216	81
45°	28	47	83	97	109	26
55°	10	20	30	29	24	8
65°	4	18	17	16	17	4
75°	4	12	12	11	10	4
85°	3	8	9	8	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	456.6	456.6	456.6	456.6	456.6
2.5°	450.5	457.5	454.0	454.0	454.9
5°	439.1	447.0	446.1	449.6	453.1
7.5°	420.8	429.5	433.9	441.8	447.9
10°	399.8	409.4	417.3	429.5	438.3
12.5°	377.0	386.6	398.0	413.8	425.1
15°	352.5	363.0	376.1	395.4	409.4
17.5°	325.4	336.8	351.7	372.7	387.5
20°	299.2	310.5	326.3	347.3	363.9
22.5°	272.1	281.7	298.3	319.3	339.4
25°	244.1	253.7	271.2	292.2	314.0
27.5°	216.1	225.7	243.2	265.1	289.5
30°	186.3	196.8	215.2	239.7	265.9
32.5°	158.3	168.8	188.1	215.2	241.4
35°	130.3	142.6	163.6	190.7	216.1
37.5°	103.2	117.2	140.8	166.2	188.9
40°	77.0	91.9	119.8	141.7	161.0
42.5°	50.7	68.2	100.6	119.0	133.8
45°	28.0	47.2	83.1	97.1	109.3
47.5°	15.7	30.6	65.6	77.0	84.0
50°	13.1	22.7	50.7	58.6	61.2
52.5°	10.5	21.0	38.5	42.9	41.1
55°	9.6	20.1	29.7	28.9	24.5
57.5°	7.9	20.1	23.6	21.0	21.0
60°	6.1	19.2	21.0	18.4	19.2
62.5°	5.2	18.4	19.2	17.5	17.5
65°	4.4	17.5	16.6	15.7	16.6
67.5°	3.5	15.7	15.7	14.9	14.9
70°	3.5	14.9	14.0	13.1	13.1
72.5°	3.5	13.1	13.1	12.2	12.2
75°	3.5	12.2	12.2	11.4	10.5
77.5°	3.5	10.5	11.4	10.5	9.6
80°	3.5	9.6	10.5	9.6	7.9
82.5°	3.5	8.7	9.6	8.7	7.0
85°	2.6	7.9	8.7	7.9	5.2
87.5°	2.6	7.9	8.7	7.0	4.4
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	5.77	6.98	6.13	7.30	7.61	6.85	8.07	7.21	8.38	8.69
	3H	7.10	8.18	7.48	8.51	8.88	8.88	9.96	9.26	10.29	10.66
	4H	7.67	8.68	8.07	9.03	9.42	9.83	10.84	10.24	11.19	11.58
	6H	8.24	9.17	8.65	9.54	9.93	10.78	11.71	11.19	12.08	12.47
	8H	8.56	9.44	8.99	9.83	10.24	11.23	12.11	11.66	12.50	12.90
	12H	8.87	9.71	9.30	10.09	10.52	11.65	12.49	12.08	12.87	13.30
4H	2H	6.73	7.74	7.13	8.09	8.47	7.52	8.53	7.93	8.88	9.27
	3H	8.76	9.59	9.17	10.00	10.40	9.80	10.64	10.22	11.04	11.45
	4H	9.83	10.58	10.27	11.00	11.45	10.95	11.70	11.39	12.12	12.57
	6H	10.71	11.35	11.17	11.80	12.27	12.12	12.77	12.59	13.22	13.69
	8H	11.12	11.72	11.59	12.17	12.64	12.68	13.29	13.15	13.74	14.21
	12H	11.49	12.03	11.98	12.51	12.99	13.22	13.76	13.71	14.24	14.72
8H	4H	10.61	11.21	11.08	11.66	12.13	11.50	12.11	11.98	12.56	13.03
	6H	11.95	12.44	12.45	12.94	13.42	12.96	13.45	13.46	13.95	14.43
	8H	12.66	13.10	13.18	13.62	14.11	13.72	14.16	14.24	14.68	15.17
	12H	13.35	13.74	13.87	14.24	14.81	14.50	14.90	15.02	15.39	15.96
12H	4H	10.76	11.30	11.25	11.78	12.26	11.61	12.15	12.10	12.63	13.11
	6H	12.27	12.71	12.79	13.23	13.72	13.18	13.63	13.71	14.15	14.64
	8H	13.17	13.56	13.68	14.05	14.63	14.09	14.48	14.60	14.97	15.55