

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: P1058100

Luminaire Tested: S122RDRP-S675D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058100
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-S675D940-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

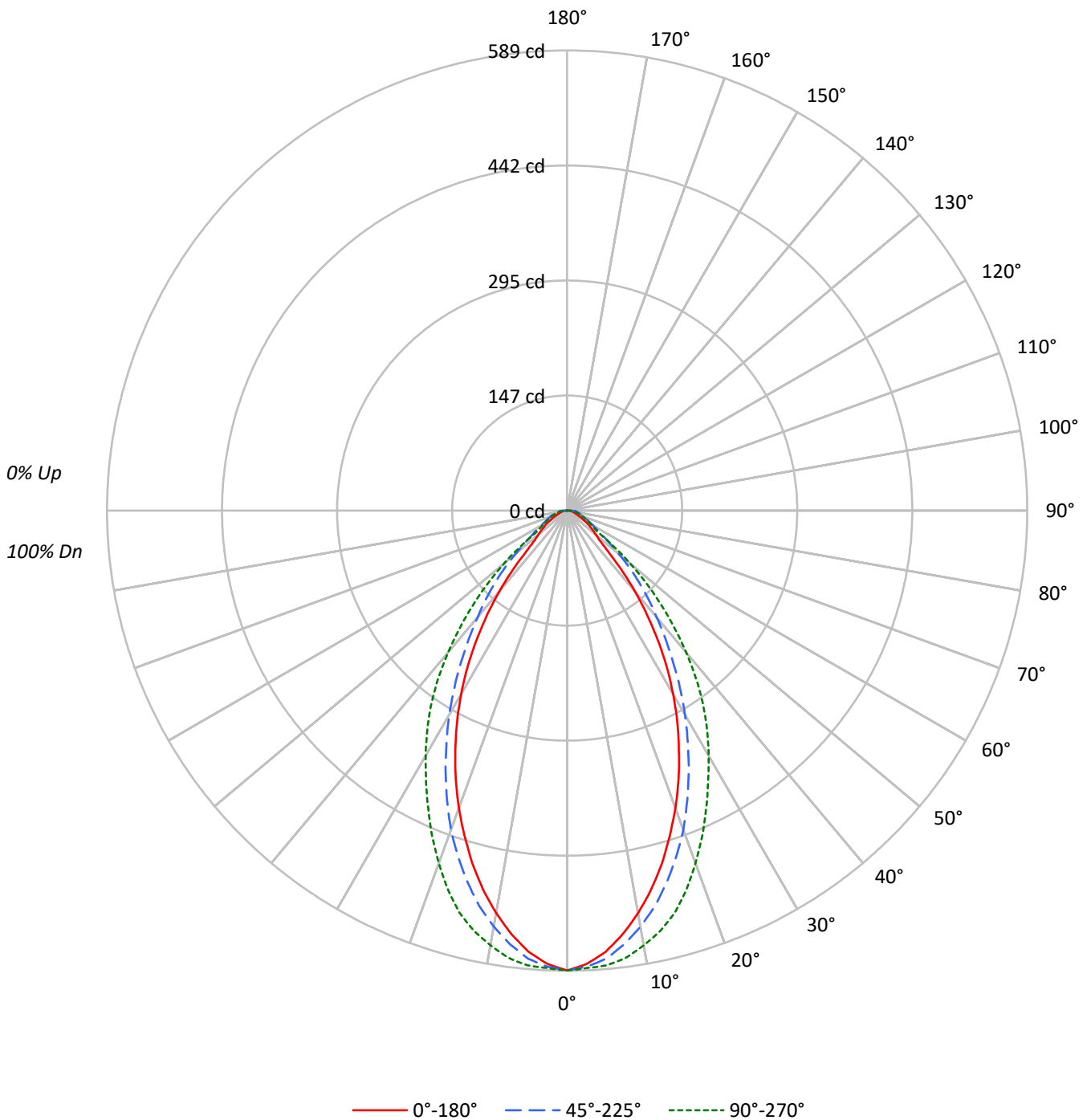
Lumens per Lamp: N/A
Luminaire Lumens: 714.1 lumens
Efficiency: N/A
Efficacy: 27.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	10863	10863	10863
5°	10499	10662	10823
10°	9801	10129	10588
15°	8940	9408	10176
20°	7953	8538	9430
25°	6892	7499	8568
30°	5778	6430	7717
35°	4553	5321	6837
40°	3245	4300	5711
45°	1918	3400	4428
50°	1381	2460	3014
55°	1155	1773	1518
60°	937	1421	1292
65°	764	1262	1183
70°	658	1225	1133
75°	620	1248	1119
80°	648	1488	1211
85°	932	2414	1482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4428 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.0	7.6
10°-20°	138.7	19.4
20°-30°	171.1	24.0
30°-40°	152.2	21.3
40°-50°	97.2	13.6
50°-60°	46.7	6.5
60°-70°	27.4	3.8
70°-80°	17.5	2.4
80°-90°	9.3	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°	363.9	51.0
0°-40°	516.1	72.3
0°-60°	659.9	92.4
0°-90°	714.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	714.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	567	577	576	579	584	53
15°	468	479	492	515	533	130
25°	338	352	368	394	421	155
35°	202	218	236	272	304	126
45°	74	95	130	151	170	62
55°	36	46	55	53	47	32
65°	18	32	29	26	27	18
75°	9	19	18	17	16	10
85°	4	10	11	10	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	588.7	588.7	588.7	588.7	588.7
2.5°	580.8	590.5	584.3	584.3	586.1
5°	566.8	577.3	575.6	579.1	584.3
7.5°	546.7	558.1	559.8	569.5	577.3
10°	523.1	535.4	540.6	554.6	565.1
12.5°	496.9	509.1	518.7	536.2	551.1
15°	468.0	479.4	492.5	515.2	532.7
17.5°	436.5	451.4	464.5	488.1	508.2
20°	405.0	419.0	434.8	457.5	480.2
22.5°	372.6	385.8	401.5	425.1	451.4
25°	338.5	351.7	368.3	394.5	420.8
27.5°	305.3	318.4	334.2	363.0	391.0
30°	271.2	284.3	301.8	331.5	362.2
32.5°	237.1	251.1	268.6	300.9	333.3
35°	202.1	217.8	236.2	272.1	303.5
37.5°	168.0	183.7	206.4	241.4	271.2
40°	134.7	153.1	178.5	209.9	237.1
42.5°	102.3	122.5	154.0	179.3	202.9
45°	73.5	95.3	130.3	151.3	169.7
47.5°	56.0	71.7	107.6	124.2	137.3
50°	48.1	57.7	85.7	98.0	105.0
52.5°	42.0	50.7	68.2	74.4	74.4
55°	35.9	46.4	55.1	53.4	47.2
57.5°	30.6	42.0	45.5	38.5	40.2
60°	25.4	38.5	38.5	34.1	35.0
62.5°	21.0	35.9	33.2	29.7	30.6
65°	17.5	31.5	28.9	26.2	27.1
67.5°	14.0	28.0	25.4	23.6	23.6
70°	12.2	25.4	22.7	21.0	21.0
72.5°	10.5	21.9	20.1	18.4	18.4
75°	8.7	19.2	17.5	16.6	15.7
77.5°	7.9	16.6	15.7	14.0	13.1
80°	6.1	14.0	14.0	13.1	11.4
82.5°	5.2	12.2	12.2	11.4	9.6
85°	4.4	10.5	11.4	9.6	7.0
87.5°	3.5	9.6	9.6	7.9	5.2
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	9.96	11.24	10.33	11.55	11.86	9.75	11.03	10.11	11.34	11.65
	3H	11.19	12.33	11.57	12.66	13.02	11.34	12.48	11.72	12.81	13.17
	4H	11.64	12.70	12.05	13.05	13.44	12.06	13.11	12.46	13.47	13.85
	6H	12.02	13.00	12.44	13.37	13.76	12.71	13.68	13.12	14.05	14.45
	8H	12.17	13.10	12.61	13.49	13.89	13.04	13.96	13.47	14.35	14.76
	12H	12.33	13.21	12.77	13.60	14.03	13.34	14.22	13.77	14.60	15.03
4H	2H	10.51	11.57	10.91	11.92	12.30	10.34	11.40	10.75	11.75	12.14
	3H	12.20	13.08	12.62	13.48	13.88	12.18	13.05	12.59	13.45	13.86
	4H	13.00	13.78	13.43	14.20	14.64	13.05	13.83	13.49	14.25	14.70
	6H	13.64	14.32	14.10	14.76	15.23	13.90	14.57	14.36	15.02	15.49
	8H	13.89	14.52	14.36	14.97	15.44	14.32	14.95	14.79	15.40	15.87
	12H	14.13	14.69	14.62	15.18	15.65	14.72	15.28	15.21	15.77	16.24
8H	4H	13.41	14.05	13.88	14.49	14.97	13.47	14.10	13.94	14.55	15.02
	6H	14.39	14.91	14.89	15.41	15.89	14.55	15.07	15.06	15.57	16.05
	8H	14.88	15.35	15.40	15.86	16.35	15.15	15.61	15.67	16.13	16.62
	12H	15.38	15.79	15.90	16.29	16.86	15.75	16.16	16.26	16.66	17.23
12H	4H	13.48	14.04	13.97	14.52	15.00	13.54	14.10	14.03	14.59	15.06
	6H	14.56	15.03	15.08	15.54	16.03	14.72	15.18	15.24	15.70	16.19
	8H	15.19	15.60	15.71	16.10	16.67	15.43	15.84	15.95	16.34	16.91