

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: P1058505

Luminaire Tested: S122RDRP-H675D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058505
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-H675D940-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

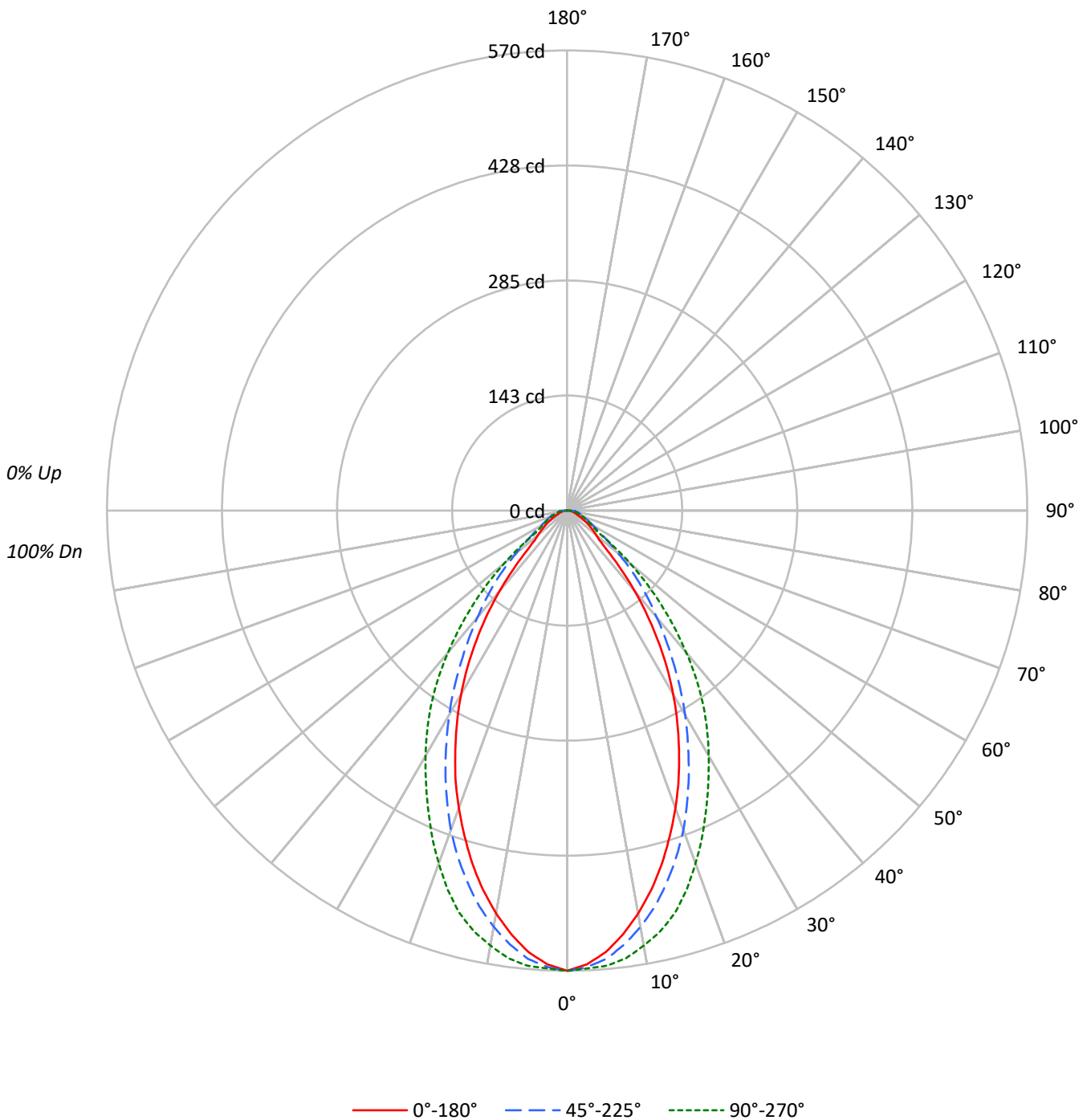
Lumens per Lamp: N/A
Luminaire Lumens: 691.5 lumens
Efficiency: N/A
Efficacy: 29.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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°	10520	10520	10520
5°	10167	10325	10482
10°	9492	9809	10253
15°	8658	9110	9855
20°	7702	8267	9133
25°	6674	7260	8297
30°	5595	6226	7472
35°	4408	5152	6620
40°	3143	4162	5531
45°	1858	3293	4288
50°	1338	2383	2919
55°	1116	1718	1470
60°	908	1377	1251
65°	738	1223	1148
70°	642	1187	1095
75°	606	1205	1084
80°	627	1445	1169
85°	889	2329	1440

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4288 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	7.6
10°-20°	134.3	19.4
20°-30°	165.7	24.0
30°-40°	147.4	21.3
40°-50°	94.1	13.6
50°-60°	45.2	6.5
60°-70°	26.5	3.8
70°-80°	16.9	2.4
80°-90°	9.0	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°	352.3	51.0
0°-40°	499.7	72.3
0°-60°	639.0	92.4
0°-90°	691.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	691.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	549	559	557	561	566	51
15°	453	464	477	499	516	126
25°	328	340	357	382	408	150
35°	196	211	229	263	294	122
45°	71	92	126	146	164	60
55°	35	45	53	52	46	31
65°	17	30	28	25	26	17
75°	8	19	17	16	15	9
85°	4	10	11	9	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	570.1	570.1	570.1	570.1	570.1
2.5°	562.5	571.8	565.9	565.9	567.6
5°	548.9	559.1	557.4	560.8	565.9
7.5°	529.4	540.4	542.1	551.5	559.1
10°	506.6	518.4	523.5	537.1	547.2
12.5°	481.1	493.0	502.3	519.3	533.7
15°	453.2	464.2	476.9	498.9	515.9
17.5°	422.7	437.1	449.8	472.7	492.2
20°	392.2	405.8	421.0	443.0	465.1
22.5°	360.9	373.6	388.8	411.7	437.1
25°	327.8	340.5	356.6	382.0	407.5
27.5°	295.6	308.3	323.6	351.5	378.7
30°	262.6	275.3	292.2	321.0	350.7
32.5°	229.6	243.1	260.1	291.4	322.7
35°	195.7	210.9	228.7	263.4	293.9
37.5°	162.6	177.9	199.9	233.8	262.6
40°	130.5	148.2	172.8	203.3	229.6
42.5°	99.1	118.6	149.1	173.7	196.5
45°	71.2	92.3	126.2	146.5	164.3
47.5°	54.2	69.5	104.2	120.3	133.0
50°	46.6	55.9	83.0	94.9	101.7
52.5°	40.7	49.1	66.1	72.0	72.0
55°	34.7	44.9	53.4	51.7	45.7
57.5°	29.6	40.7	44.0	37.3	39.0
60°	24.6	37.3	37.3	33.0	33.9
62.5°	20.3	34.7	32.2	28.8	29.6
65°	16.9	30.5	28.0	25.4	26.3
67.5°	13.6	27.1	24.6	22.9	22.9
70°	11.9	24.6	22.0	20.3	20.3
72.5°	10.2	21.2	19.5	17.8	17.8
75°	8.5	18.6	16.9	16.1	15.2
77.5°	7.6	16.1	15.2	13.6	12.7
80°	5.9	13.6	13.6	12.7	11.0
82.5°	5.1	11.9	11.9	11.0	9.3
85°	4.2	10.2	11.0	9.3	6.8
87.5°	3.4	9.3	9.3	7.6	5.1
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	9.85	11.13	10.22	11.44	11.76	9.64	10.92	10.01	11.23	11.55
	3H	11.09	12.22	11.47	12.55	12.92	11.23	12.37	11.61	12.70	13.06
	4H	11.54	12.60	11.94	12.95	13.33	11.95	13.01	12.35	13.36	13.74
	6H	11.92	12.89	12.33	13.26	13.65	12.60	13.57	13.01	13.94	14.34
	8H	12.07	12.99	12.50	13.38	13.79	12.93	13.85	13.36	14.24	14.65
	12H	12.23	13.11	12.66	13.49	13.92	13.23	14.11	13.66	14.49	14.92
4H	2H	10.40	11.46	10.81	11.81	12.20	10.24	11.30	10.64	11.65	12.03
	3H	12.10	12.97	12.51	13.37	13.78	12.07	12.94	12.48	13.35	13.75
	4H	12.89	13.67	13.33	14.09	14.54	12.94	13.72	13.38	14.14	14.59
	6H	13.53	14.21	14.00	14.66	15.12	13.79	14.46	14.25	14.91	15.38
	8H	13.78	14.42	14.25	14.86	15.34	14.21	14.84	14.68	15.29	15.76
	12H	14.03	14.59	14.52	15.07	15.55	14.61	15.17	15.10	15.66	16.13
8H	4H	13.31	13.94	13.78	14.39	14.86	13.36	13.99	13.83	14.44	14.91
	6H	14.29	14.81	14.79	15.30	15.78	14.45	14.97	14.95	15.46	15.94
	8H	14.78	15.25	15.30	15.76	16.25	15.04	15.50	15.56	16.02	16.51
	12H	15.28	15.70	15.80	16.19	16.76	15.64	16.05	16.15	16.55	17.12
12H	4H	13.37	13.93	13.86	14.42	14.89	13.44	14.00	13.92	14.48	14.95
	6H	14.46	14.92	14.98	15.44	15.93	14.61	15.08	15.13	15.59	16.09
	8H	15.10	15.51	15.61	16.00	16.57	15.32	15.73	15.84	16.23	16.80