

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: P1058056

Luminaire Tested: S122RDRP-S675D840-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058056
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D840-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

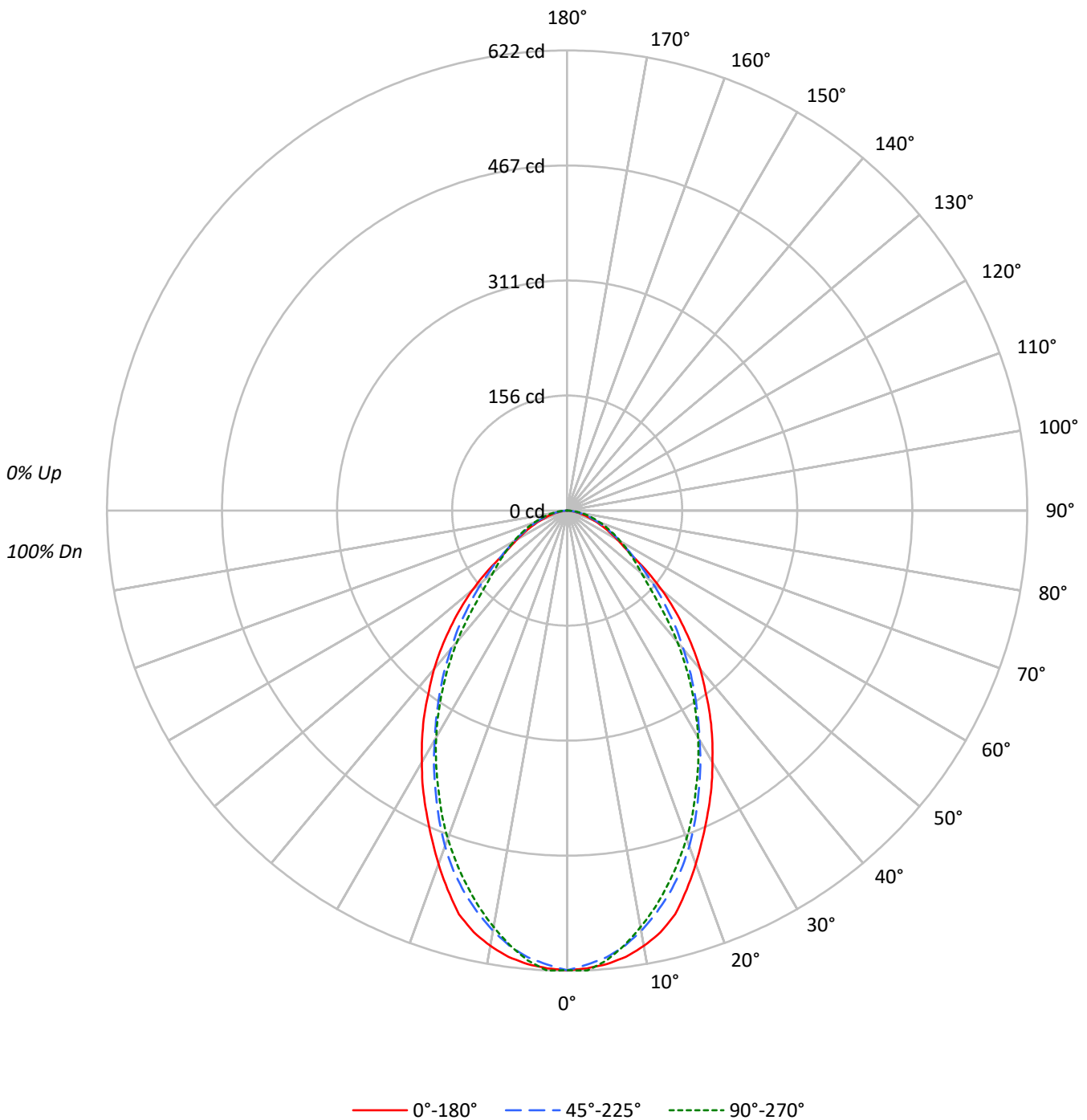
Lumens per Lamp: N/A
Luminaire Lumens: 943.6 lumens
Efficiency: N/A
Efficacy: 36.6 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88																												
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77																												
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68																												
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61																												
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54																												
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49																												
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44																												
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41																												
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37																												
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11465	11465	11465
5°	11397	11232	11306
10°	11195	10808	10714
15°	10792	10224	10016
20°	9985	9481	9267
25°	9164	8559	8399
30°	8367	7630	7547
35°	7578	6753	6596
40°	6745	5887	5576
45°	5809	5060	4465
50°	4800	4260	3749
55°	3468	3532	3375
60°	2886	3030	3067
65°	2463	2633	2807
70°	2029	2347	2563
75°	1690	1975	2324
80°	1265	1573	2104
85°	423	847	1884

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5809 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	6.1
10°-20°	151.2	16.0
20°-30°	195.7	20.7
30°-40°	192.0	20.3
40°-50°	151.2	16.0
50°-60°	99.1	10.5
60°-70°	60.3	6.4
70°-80°	30.2	3.2
80°-90°	6.5	0.7
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°	404.4	42.9
0°-40°	596.4	63.2
0°-60°	846.6	89.7
0°-90°	943.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	943.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	621	621	621	621	621	
5°	615	615	606	610	610	58
15°	565	557	535	528	524	157
25°	450	435	420	418	412	207
35°	336	318	300	299	293	210
45°	223	209	194	180	171	172
55°	108	114	110	106	105	102
65°	56	57	60	63	64	56
75°	24	25	28	32	33	25
85°	2	3	4	7	9	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	621.3	621.3	621.3	621.3	621.3
2.5°	619.3	620.3	614.3	620.3	622.3
5°	615.3	615.3	606.4	610.4	610.4
7.5°	608.4	607.4	593.6	593.6	592.6
10°	597.5	593.6	576.8	573.8	571.8
12.5°	583.7	576.8	557.0	552.0	549.1
15°	564.9	557.0	535.2	528.3	524.3
17.5°	537.2	529.3	510.5	502.6	498.6
20°	508.5	496.6	482.8	475.8	471.9
22.5°	478.8	465.0	452.1	447.2	443.2
25°	450.1	435.3	420.4	418.5	412.5
27.5°	422.4	404.6	389.8	388.8	383.8
30°	392.7	374.0	358.1	359.1	354.2
32.5°	365.0	347.2	328.4	329.4	323.5
35°	336.4	317.6	299.8	298.8	292.8
37.5°	306.7	288.9	272.1	268.1	262.2
40°	280.0	262.2	244.4	237.4	231.5
42.5°	251.3	235.5	219.6	208.7	200.8
45°	222.6	208.7	193.9	180.1	171.1
47.5°	194.9	184.0	171.1	154.3	148.4
50°	167.2	159.3	148.4	133.6	130.6
52.5°	138.5	135.5	128.6	118.7	117.7
55°	107.8	113.8	109.8	105.9	104.9
57.5°	91.0	92.0	95.0	94.0	94.0
60°	78.2	78.2	82.1	83.1	83.1
62.5°	66.3	67.3	71.2	73.2	73.2
65°	56.4	57.4	60.3	63.3	64.3
67.5°	46.5	48.5	51.4	54.4	55.4
70°	37.6	39.6	43.5	46.5	47.5
72.5°	30.7	31.7	35.6	38.6	39.6
75°	23.7	24.7	27.7	31.7	32.6
77.5°	16.8	18.8	21.8	24.7	26.7
80°	11.9	12.9	14.8	18.8	19.8
82.5°	6.9	7.9	9.9	12.9	13.9
85°	2.0	3.0	4.0	6.9	8.9
87.5°	0.0	0.0	0.0	2.0	4.0
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	14.60	15.99	14.96	16.31	16.62	14.78	16.17	15.14	16.49	16.80
	3H	15.73	16.97	16.11	17.30	17.67	16.24	17.48	16.62	17.81	18.17
	4H	16.08	17.24	16.48	17.59	17.98	16.78	17.94	17.18	18.29	18.67
	6H	16.27	17.34	16.68	17.71	18.10	17.19	18.26	17.61	18.63	19.02
	8H	16.29	17.31	16.72	17.70	18.10	17.32	18.34	17.75	18.73	19.13
	12H	16.28	17.25	16.71	17.63	18.06	17.40	18.38	17.83	18.76	19.19
4H	2H	15.05	16.22	15.46	16.57	16.95	15.20	16.37	15.60	16.72	17.10
	3H	16.39	17.35	16.81	17.76	18.16	16.87	17.83	17.29	18.24	18.64
	4H	16.84	17.70	17.27	18.11	18.56	17.54	18.40	17.97	18.82	19.26
	6H	17.11	17.85	17.57	18.30	18.76	18.07	18.82	18.54	19.26	19.73
	8H	17.15	17.85	17.62	18.29	18.76	18.24	18.94	18.71	19.38	19.85
	12H	17.15	17.76	17.63	18.25	18.72	18.37	18.98	18.85	19.46	19.94
8H	4H	17.05	17.75	17.52	18.19	18.66	17.69	18.38	18.16	18.83	19.30
	6H	17.40	17.97	17.90	18.46	18.94	18.32	18.89	18.82	19.38	19.86
	8H	17.48	17.99	18.00	18.50	18.99	18.56	19.07	19.07	19.58	20.07
	12H	17.49	17.94	18.01	18.44	19.01	18.74	19.19	19.25	19.68	20.25
12H	4H	17.06	17.68	17.55	18.16	18.63	17.68	18.29	18.16	18.77	19.25
	6H	17.42	17.93	17.94	18.45	18.94	18.31	18.83	18.83	19.34	19.83
	8H	17.54	17.99	18.05	18.48	19.05	18.59	19.04	19.10	19.54	20.10