

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: P1058055

Luminaire Tested: S122RDRP-S675D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058055
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-S675D840-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, 80 CRI LEDS
Ballast/Driver: -

Summary

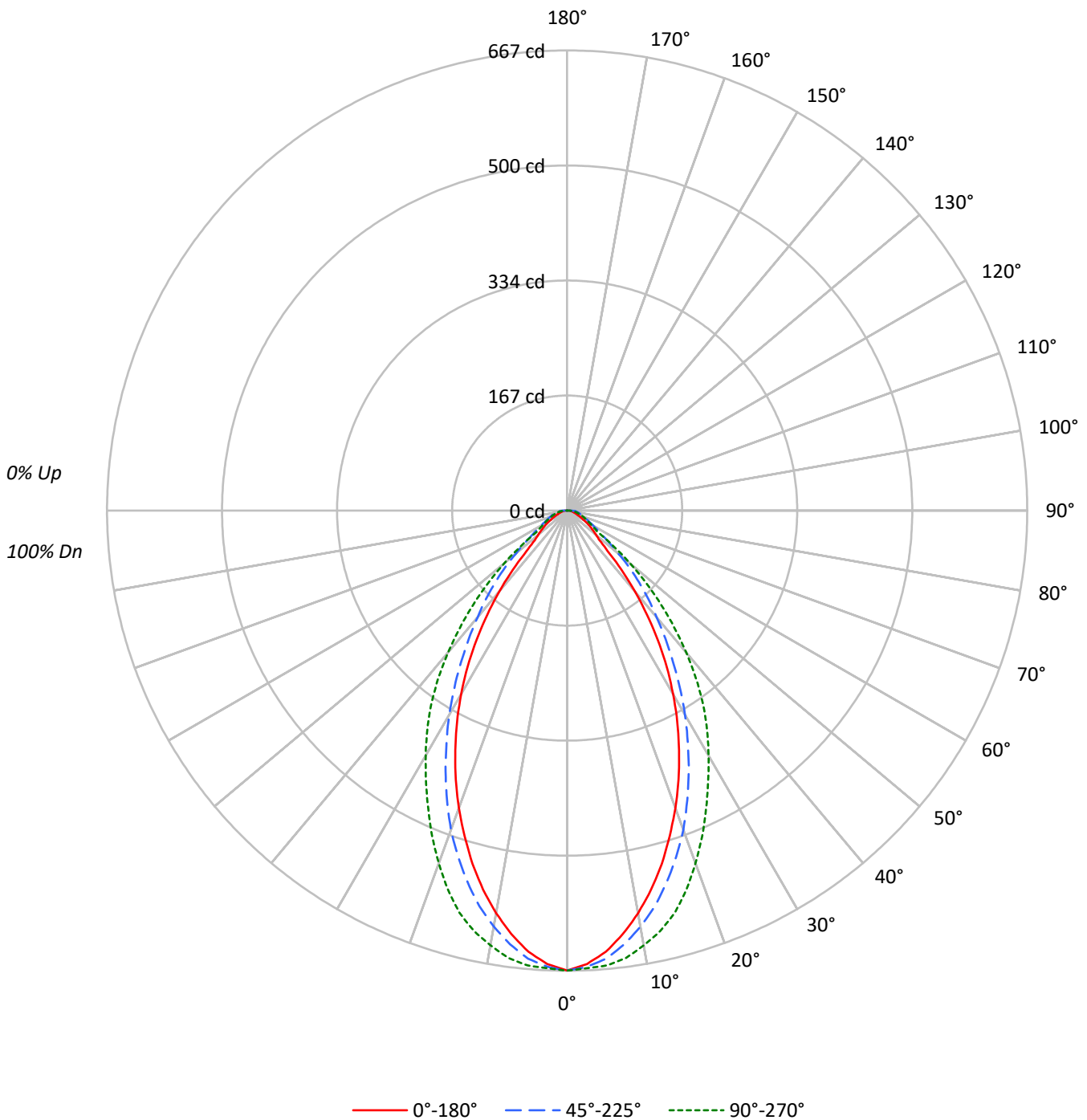
Lumens per Lamp: N/A
Luminaire Lumens: 808.7 lumens
Efficiency: N/A
Efficacy: 31.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12302	12302	12302
5°	11892	12075	12258
10°	11100	11471	11992
15°	10125	10654	11525
20°	9007	9669	10680
25°	7806	8492	9702
30°	6543	7283	8738
35°	5154	6026	7745
40°	3676	4868	6468
45°	2171	3852	5016
50°	1565	2787	3413
55°	1306	2007	1721
60°	1059	1609	1461
65°	865	1428	1340
70°	750	1392	1284
75°	706	1412	1269
80°	733	1690	1371
85°	1059	2731	1673

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5016 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.1	7.6
10°-20°	157.1	19.4
20°-30°	193.8	24.0
30°-40°	172.4	21.3
40°-50°	110.0	13.6
50°-60°	52.8	6.5
60°-70°	31.0	3.8
70°-80°	19.8	2.5
80°-90°	10.6	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°	412.1	51.0
0°-40°	584.4	72.3
0°-60°	747.3	92.4
0°-90°	808.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	808.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	642	654	652	656	662	60
15°	530	543	558	584	603	148
25°	383	398	417	447	476	175
35°	229	247	268	308	344	142
45°	83	108	148	171	192	70
55°	41	52	62	60	54	37
65°	20	36	33	30	31	20
75°	10	22	20	19	18	11
85°	5	12	13	11	8	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	666.7	666.7	666.7	666.7	666.7
2.5°	657.8	668.7	661.8	661.8	663.8
5°	642.0	653.8	651.9	655.8	661.8
7.5°	619.2	632.0	634.0	644.9	653.8
10°	592.4	606.3	612.2	628.1	640.0
12.5°	562.7	576.6	587.5	607.3	624.1
15°	530.0	542.9	557.7	583.5	603.3
17.5°	494.3	511.2	526.0	552.8	575.6
20°	458.7	474.5	492.4	518.1	543.9
22.5°	422.0	436.9	454.7	481.5	511.2
25°	383.4	398.3	417.1	446.8	476.5
27.5°	345.7	360.6	378.4	411.1	442.8
30°	307.1	322.0	341.8	375.5	410.1
32.5°	268.5	284.3	304.1	340.8	377.4
35°	228.8	246.7	267.5	308.1	343.8
37.5°	190.2	208.0	233.8	273.4	307.1
40°	152.6	173.4	202.1	237.8	268.5
42.5°	115.9	138.7	174.4	203.1	229.8
45°	83.2	108.0	147.6	171.4	192.2
47.5°	63.4	81.2	121.9	140.7	155.5
50°	54.5	65.4	97.1	111.0	118.9
52.5°	47.6	57.5	77.3	84.2	84.2
55°	40.6	52.5	62.4	60.4	53.5
57.5°	34.7	47.6	51.5	43.6	45.6
60°	28.7	43.6	43.6	38.6	39.6
62.5°	23.8	40.6	37.6	33.7	34.7
65°	19.8	35.7	32.7	29.7	30.7
67.5°	15.9	31.7	28.7	26.7	26.7
70°	13.9	28.7	25.8	23.8	23.8
72.5°	11.9	24.8	22.8	20.8	20.8
75°	9.9	21.8	19.8	18.8	17.8
77.5°	8.9	18.8	17.8	15.9	14.9
80°	6.9	15.9	15.9	14.9	12.9
82.5°	5.9	13.9	13.9	12.9	10.9
85°	5.0	11.9	12.9	10.9	7.9
87.5°	4.0	10.9	10.9	8.9	5.9
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	10.40	11.67	10.76	11.99	12.30	10.18	11.46	10.55	11.77	12.09
	3H	11.63	12.76	12.01	13.09	13.46	11.77	12.91	12.15	13.24	13.60
	4H	12.08	13.14	12.48	13.49	13.87	12.49	13.55	12.89	13.90	14.28
	6H	12.46	13.43	12.87	13.80	14.20	13.14	14.12	13.56	14.49	14.88
	8H	12.61	13.53	13.04	13.93	14.33	13.47	14.40	13.90	14.79	15.19
	12H	12.77	13.65	13.20	14.04	14.47	13.77	14.65	14.20	15.04	15.47
4H	2H	10.95	12.00	11.35	12.36	12.74	10.78	11.83	11.18	12.19	12.57
	3H	12.64	13.51	13.05	13.92	14.32	12.61	13.48	13.02	13.89	14.29
	4H	13.43	14.22	13.87	14.64	15.08	13.48	14.27	13.92	14.69	15.13
	6H	14.08	14.75	14.54	15.20	15.67	14.33	15.01	14.80	15.46	15.92
	8H	14.32	14.96	14.79	15.41	15.88	14.76	15.39	15.23	15.84	16.31
	12H	14.57	15.13	15.06	15.62	16.09	15.16	15.72	15.64	16.20	16.68
8H	4H	13.85	14.48	14.32	14.93	15.40	13.90	14.53	14.37	14.98	15.45
	6H	14.83	15.35	15.33	15.85	16.33	14.99	15.51	15.49	16.01	16.49
	8H	15.32	15.79	15.84	16.30	16.80	15.58	16.05	16.11	16.57	17.06
	12H	15.83	16.24	16.34	16.73	17.30	16.19	16.60	16.70	17.09	17.66
12H	4H	13.92	14.48	14.41	14.96	15.44	13.98	14.54	14.46	15.02	15.49
	6H	15.00	15.47	15.52	15.98	16.47	15.16	15.62	15.68	16.14	16.63
	8H	15.64	16.05	16.15	16.54	17.12	15.87	16.28	16.39	16.78	17.35