

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: P1058058

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058058  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55 )  
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-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

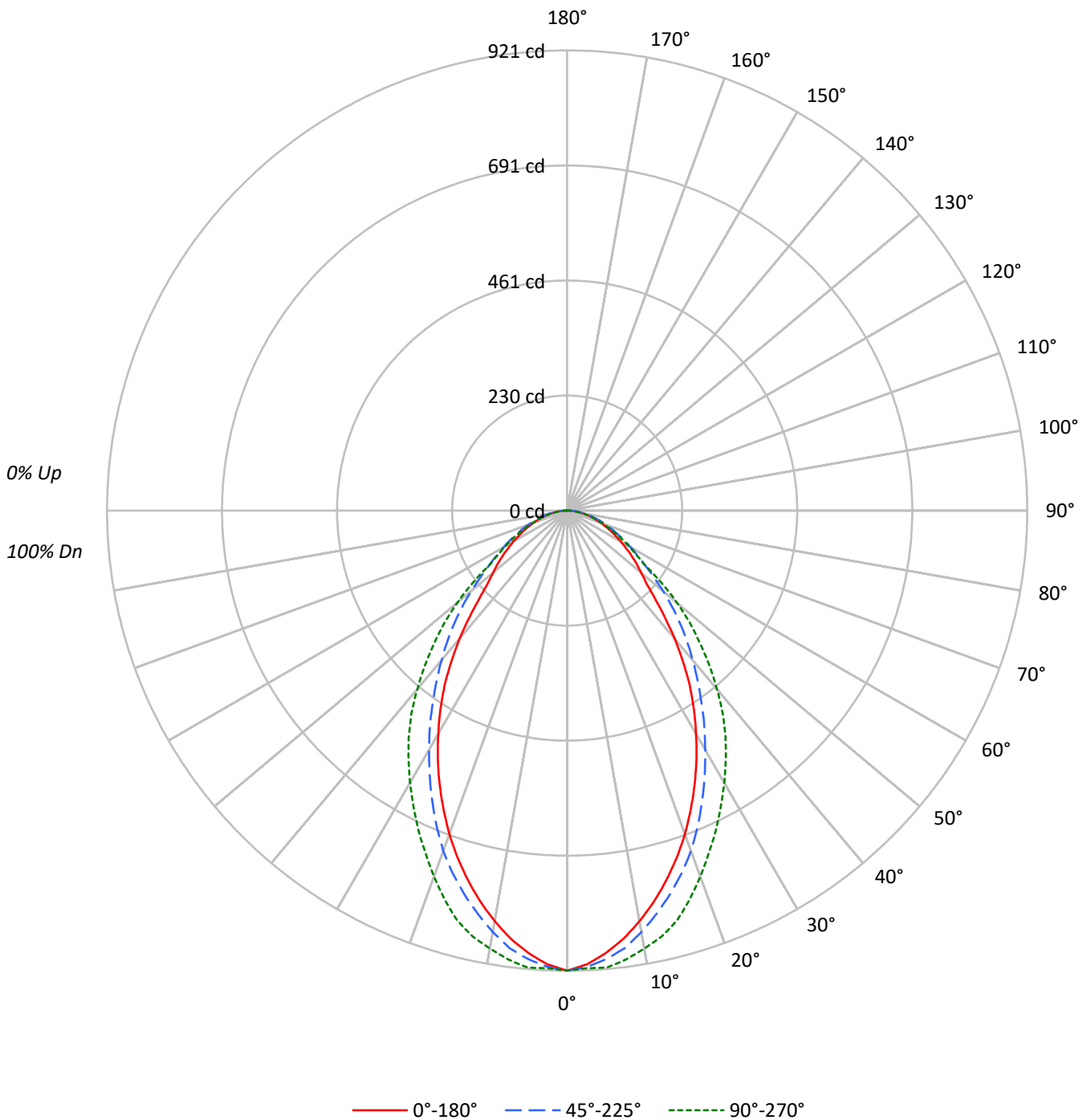
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1501.1 lumens  
Efficiency: N/A  
Efficacy: 58.2 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
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<sub>in</sub>): 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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	46	39	35	45	39	35	44	38	34	33

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	16989	16989	16989
5°	16469	16687	17000
10°	15638	16046	16678
15°	14639	15187	16228
20°	13532	14231	15301
25°	12295	13022	14352
30°	10990	11770	13396
35°	9635	10549	12444
40°	8060	9421	11232
45°	6459	8345	9817
50°	5543	7191	8242
55°	5064	6116	6084
60°	4602	5407	5300
65°	4192	4842	4624
70°	3847	4435	4111
75°	3600	4092	3600
80°	3369	3783	3156
85°	3345	3980	2731

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9817 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.0	5.7
10°-20°	225.0	15.0
20°-30°	296.8	19.8
30°-40°	298.9	19.9
40°-50°	243.2	16.2
50°-60°	165.9	11.0
60°-70°	107.7	7.2
70°-80°	59.3	3.9
80°-90°	19.3	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°	606.8	40.4
0°-40°	905.7	60.3
0°-60°	1314.8	87.6
0°-90°	1501.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1501.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	921	921	921	921	921	
5°	889	906	901	909	918	83
15°	766	786	795	828	850	215
25°	604	624	640	668	705	277
35°	428	450	468	509	552	266
45°	248	278	320	348	376	195
55°	157	173	190	191	189	141
65°	96	114	111	105	106	95
75°	50	62	57	52	50	54
85°	16	21	19	15	13	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	920.7	920.7	920.7	920.7	920.7
2.5°	908.9	923.7	913.8	914.8	916.8
5°	889.1	905.9	900.9	908.9	917.8
7.5°	864.3	881.1	883.1	895.0	905.9
10°	834.6	853.4	856.4	874.2	890.1
12.5°	801.9	822.7	826.7	852.4	873.2
15°	766.3	786.1	795.0	827.7	849.5
17.5°	728.7	747.5	761.4	791.1	815.8
20°	689.1	706.9	724.7	751.5	779.2
22.5°	646.5	666.3	683.1	709.9	741.5
25°	603.9	623.7	639.6	668.3	704.9
27.5°	560.4	580.2	596.0	626.7	666.3
30°	515.8	536.6	552.4	587.1	628.7
32.5°	472.3	493.0	510.9	547.5	591.1
35°	427.7	449.5	468.3	508.9	552.4
37.5°	380.2	404.9	428.7	469.3	511.9
40°	334.6	362.4	391.1	428.7	466.3
42.5°	289.1	319.8	355.4	387.1	421.8
45°	247.5	278.2	319.8	347.5	376.2
47.5°	214.8	240.6	285.1	307.9	333.6
50°	193.1	210.9	250.5	268.3	287.1
52.5°	175.2	190.1	217.8	229.7	239.6
55°	157.4	173.3	190.1	191.1	189.1
57.5°	139.6	157.4	166.3	159.4	163.4
60°	124.7	142.6	146.5	139.6	143.6
62.5°	108.9	128.7	128.7	121.8	123.8
65°	96.0	113.9	110.9	104.9	105.9
67.5°	83.2	101.0	96.0	90.1	90.1
70°	71.3	88.1	82.2	76.2	76.2
72.5°	60.4	74.3	70.3	63.4	62.4
75°	50.5	62.4	57.4	51.5	50.5
77.5°	40.6	50.5	46.5	41.6	39.6
80°	31.7	40.6	35.6	31.7	29.7
82.5°	23.8	30.7	26.7	22.8	20.8
85°	15.8	20.8	18.8	14.9	12.9
87.5°	7.9	13.9	11.9	9.9	7.9
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	16.56	18.00	16.93	18.31	18.63	16.81	18.25	17.17	18.56	18.87
	3H	18.09	19.38	18.47	19.70	20.07	18.17	19.45	18.54	19.78	20.14
	4H	18.65	19.86	19.05	20.21	20.59	18.65	19.85	19.05	20.20	20.58
	6H	19.08	20.19	19.49	20.56	20.95	19.00	20.11	19.41	20.48	20.87
	8H	19.23	20.29	19.66	20.68	21.08	19.10	20.16	19.53	20.55	20.95
	12H	19.34	20.35	19.77	20.73	21.16	19.17	20.18	19.60	20.57	21.00
4H	2H	17.13	18.34	17.53	18.69	19.07	17.33	18.54	17.73	18.89	19.27
	3H	18.94	19.93	19.35	20.34	20.74	18.91	19.90	19.32	20.31	20.71
	4H	19.68	20.58	20.11	20.99	21.43	19.50	20.40	19.93	20.81	21.26
	6H	20.27	21.05	20.72	21.49	21.95	19.97	20.75	20.43	21.19	21.66
	8H	20.48	21.21	20.94	21.65	22.12	20.12	20.85	20.58	21.29	21.76
	12H	20.64	21.29	21.12	21.77	22.24	20.23	20.88	20.71	21.36	21.83
8H	4H	19.94	20.67	20.41	21.12	21.59	19.79	20.52	20.26	20.96	21.43
	6H	20.70	21.30	21.20	21.79	22.27	20.38	20.98	20.88	21.48	21.95
	8H	21.03	21.56	21.54	22.08	22.57	20.60	21.14	21.12	21.65	22.14
	12H	21.31	21.78	21.82	22.28	22.84	20.79	21.26	21.30	21.76	22.32
12H	4H	19.96	20.61	20.44	21.09	21.56	19.82	20.47	20.31	20.95	21.43
	6H	20.74	21.29	21.26	21.80	22.29	20.45	20.99	20.97	21.50	21.99
	8H	21.14	21.62	21.65	22.11	22.68	20.73	21.21	21.25	21.70	22.27