

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: P1058092

Luminaire Tested: S122RDRP-S675D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058092  
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-S675D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

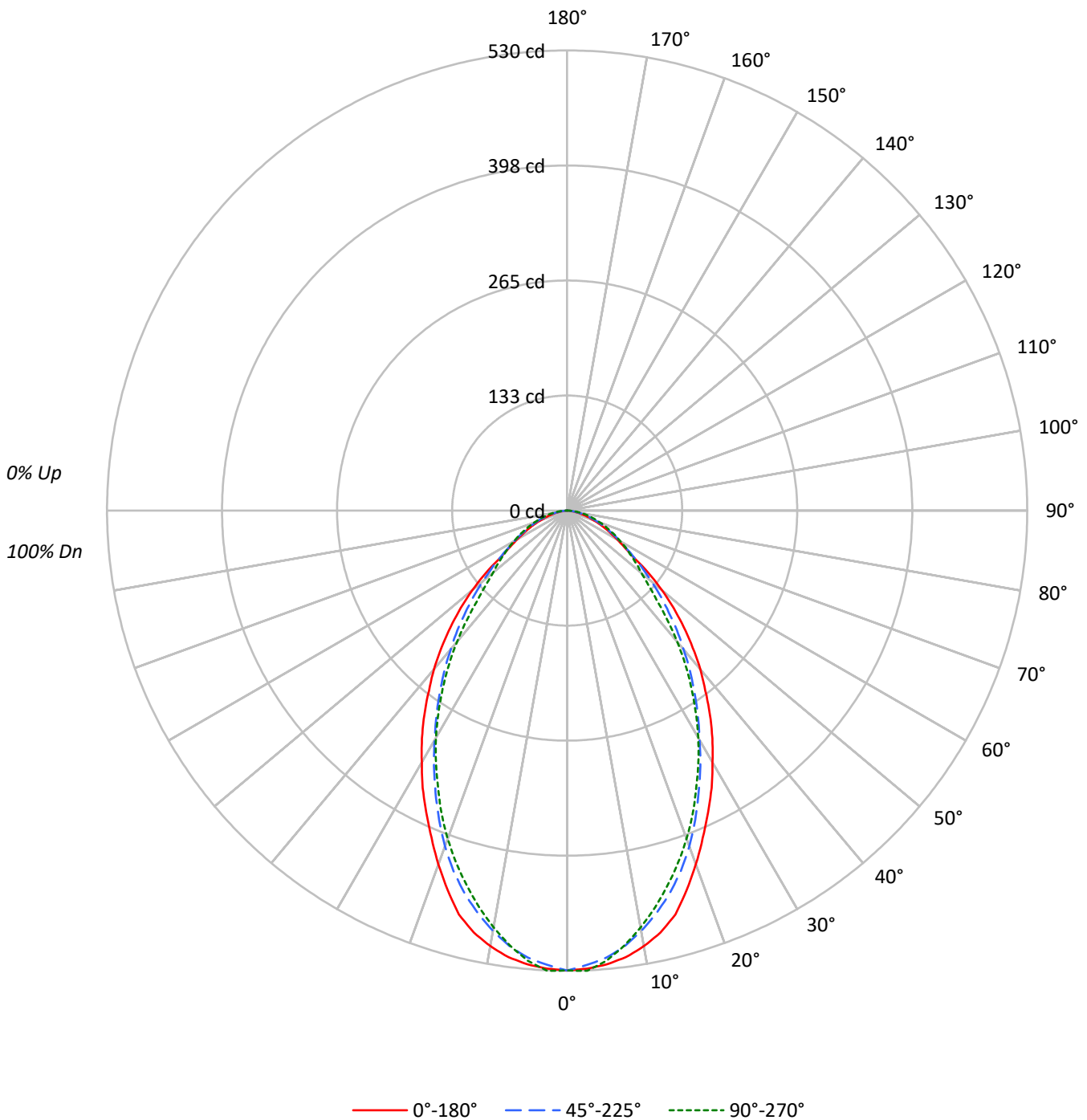
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 804.4 lumens  
Efficiency: N/A  
Efficacy: 31.2 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<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	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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54					54			
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49					49			
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44					44			
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41					41			
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

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

	0°	45°	90°
0°	9774	9774	9774
5°	9717	9576	9639
10°	9545	9213	9134
15°	9200	8717	8539
20°	8513	8082	7900
25°	7814	7299	7161
30°	7136	6505	6435
35°	6461	5758	5625
40°	5750	5018	4755
45°	4953	4314	3807
50°	4091	3631	3195
55°	2957	3011	2876
60°	2458	2583	2617
65°	2100	2249	2393
70°	1732	2002	2185
75°	1440	1683	1982
80°	1073	1350	1796
85°	360	720	1609

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4953 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.0	6.1
10°-20°	128.9	16.0
20°-30°	166.9	20.7
30°-40°	163.7	20.3
40°-50°	128.9	16.0
50°-60°	84.5	10.5
60°-70°	51.4	6.4
70°-80°	25.7	3.2
80°-90°	5.5	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°	344.8	42.9
0°-40°	508.4	63.2
0°-60°	721.8	89.7
0°-90°	804.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	804.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	530	530	530	530	530	
5°	525	525	517	520	520	50
15°	482	475	456	450	447	134
25°	384	371	358	357	352	176
35°	287	271	256	255	250	179
45°	190	178	165	154	146	146
55°	92	97	94	90	89	87
65°	48	49	52	54	55	48
75°	20	21	24	27	28	22
85°	2	2	3	6	8	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	529.7	529.7	529.7	529.7	529.7
2.5°	528.0	528.8	523.8	528.8	530.5
5°	524.6	524.6	517.0	520.4	520.4
7.5°	518.7	517.9	506.1	506.1	505.2
10°	509.4	506.1	491.7	489.2	487.5
12.5°	497.6	491.7	474.9	470.6	468.1
15°	481.6	474.9	456.3	450.4	447.0
17.5°	458.0	451.2	435.2	428.5	425.1
20°	433.5	423.4	411.6	405.7	402.3
22.5°	408.2	396.4	385.5	381.2	377.9
25°	383.8	371.1	358.5	356.8	351.7
27.5°	360.2	345.0	332.3	331.5	327.3
30°	334.9	318.8	305.3	306.2	302.0
32.5°	311.2	296.1	280.0	280.9	275.8
35°	286.8	270.7	255.6	254.7	249.7
37.5°	261.5	246.3	232.0	228.6	223.5
40°	238.7	223.5	208.3	202.4	197.4
42.5°	214.2	200.7	187.2	178.0	171.2
45°	189.8	178.0	165.3	153.5	145.9
47.5°	166.2	156.9	145.9	131.6	126.5
50°	142.5	135.8	126.5	113.9	111.3
52.5°	118.1	115.6	109.6	101.2	100.4
55°	91.9	97.0	93.6	90.2	89.4
57.5°	77.6	78.4	81.0	80.1	80.1
60°	66.6	66.6	70.0	70.9	70.9
62.5°	56.5	57.4	60.7	62.4	62.4
65°	48.1	48.9	51.5	54.0	54.8
67.5°	39.6	41.3	43.9	46.4	47.2
70°	32.1	33.7	37.1	39.6	40.5
72.5°	26.1	27.0	30.4	32.9	33.7
75°	20.2	21.1	23.6	27.0	27.8
77.5°	14.3	16.0	18.6	21.1	22.8
80°	10.1	11.0	12.7	16.0	16.9
82.5°	5.9	6.7	8.4	11.0	11.8
85°	1.7	2.5	3.4	5.9	7.6
87.5°	0.0	0.0	0.0	1.7	3.4
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	14.04	15.44	14.41	15.75	16.06	14.22	15.62	14.59	15.93	16.24
	3H	15.17	16.42	15.55	16.75	17.11	15.68	16.93	16.06	17.25	17.62
	4H	15.52	16.69	15.93	17.04	17.42	16.22	17.39	16.62	17.74	18.12
	6H	15.71	16.78	16.12	17.15	17.54	16.64	17.71	17.05	18.08	18.47
	8H	15.73	16.75	16.16	17.14	17.54	16.76	17.78	17.19	18.17	18.57
	12H	15.72	16.69	16.15	17.07	17.50	16.85	17.82	17.28	18.20	18.63
4H	2H	14.50	15.66	14.90	16.01	16.39	14.65	15.81	15.05	16.16	16.54
	3H	15.84	16.80	16.25	17.20	17.60	16.32	17.28	16.73	17.68	18.08
	4H	16.28	17.14	16.72	17.56	18.00	16.98	17.84	17.42	18.26	18.70
	6H	16.55	17.30	17.01	17.74	18.21	17.52	18.26	17.98	18.71	19.17
	8H	16.60	17.29	17.06	17.74	18.21	17.69	18.38	18.16	18.83	19.30
	12H	16.59	17.21	17.08	17.69	18.16	17.81	18.43	18.29	18.91	19.38
8H	4H	16.50	17.19	16.96	17.64	18.11	17.13	17.83	17.60	18.27	18.74
	6H	16.84	17.41	17.34	17.91	18.39	17.77	18.34	18.27	18.83	19.31
	8H	16.92	17.43	17.44	17.94	18.44	18.00	18.51	18.52	19.02	19.51
	12H	16.94	17.39	17.45	17.88	18.45	18.19	18.64	18.70	19.13	19.70
12H	4H	16.51	17.12	16.99	17.61	18.08	17.12	17.74	17.61	18.22	18.69
	6H	16.87	17.38	17.39	17.89	18.38	17.76	18.27	18.28	18.78	19.28
	8H	16.98	17.43	17.50	17.93	18.50	18.04	18.49	18.55	18.98	19.55