

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: P1058066

Luminaire Tested: S122RDRP-S675D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058066  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S675D850-X4F0-XX-UDD-WVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

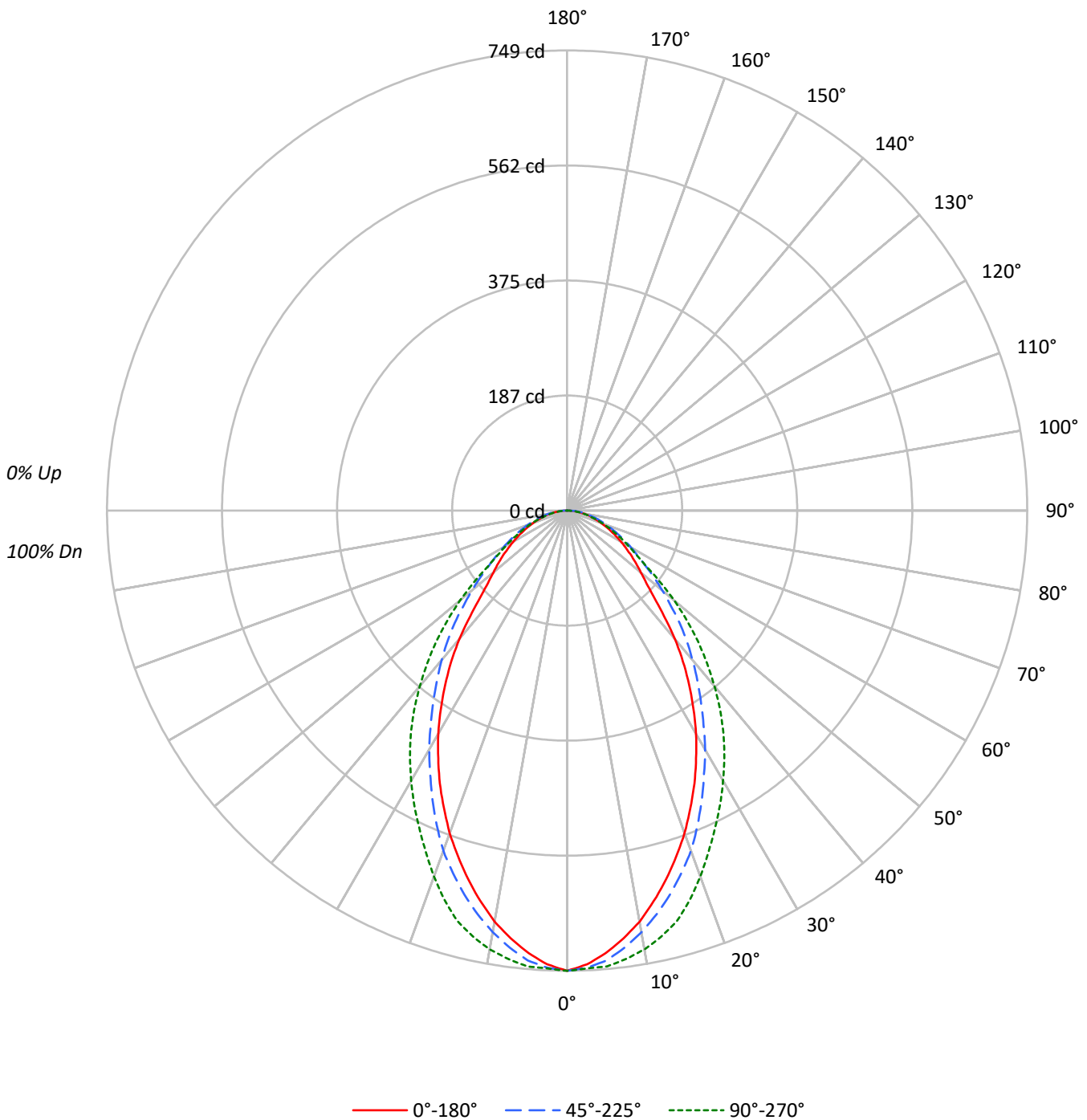
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1219.8 lumens  
Efficiency: N/A  
Efficacy: 47.3 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	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	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	79	84	80	78					76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68					66				
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61					59				
5	81	70	62	56	79	69	61	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	45	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	45	39	35	45	39	34	44	38	34					33				

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

	0°	45°	90°
0°	13823	13823	13823
5°	13392	13613	13794
10°	12732	13058	13586
15°	11880	12358	13208
20°	10973	11572	12446
25°	9983	10559	11599
30°	8943	9567	10818
35°	7787	8546	9993
40°	6574	7648	8982
45°	5219	6751	7857
50°	4496	5805	6522
55°	4092	4967	5003
60°	3731	4414	4251
65°	3419	3986	3751
70°	3167	3696	3345
75°	2944	3486	2944
80°	2773	3347	2657
85°	2752	3451	2308

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7857 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.1	5.7
10°-20°	182.8	15.0
20°-30°	240.6	19.7
30°-40°	241.9	19.8
40°-50°	196.0	16.1
50°-60°	135.0	11.1
60°-70°	88.4	7.2
70°-80°	49.2	4.0
80°-90°	16.7	1.4
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°	492.5	40.4
0°-40°	734.4	60.2
0°-60°	1065.5	87.4
0°-90°	1219.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1219.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	749	749	749	749	749	
5°	723	737	735	738	745	68
15°	622	637	647	671	691	174
25°	490	503	519	541	570	225
35°	346	362	379	413	444	216
45°	200	223	259	282	301	158
55°	127	141	154	158	156	114
65°	78	94	91	87	86	78
75°	41	51	49	44	41	44
85°	13	17	16	14	11	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	749.1	749.1	749.1	749.1	749.1
2.5°	739.3	752.3	744.7	744.7	745.8
5°	723.0	737.1	734.9	738.2	744.7
7.5°	702.3	717.5	717.5	727.3	736.0
10°	679.5	694.7	696.9	712.1	725.1
12.5°	651.2	666.4	673.0	692.5	709.9
15°	621.9	637.1	646.9	670.8	691.4
17.5°	590.3	605.6	618.6	643.6	664.3
20°	558.8	572.9	589.3	611.0	633.8
22.5°	524.0	539.2	554.5	575.1	601.2
25°	490.3	503.4	518.6	541.4	569.7
27.5°	454.4	468.6	482.7	509.9	539.2
30°	419.7	433.8	449.0	477.3	507.7
32.5°	382.7	397.9	413.1	444.7	476.2
35°	345.7	362.0	379.4	413.1	443.6
37.5°	309.8	327.2	347.9	382.7	408.8
40°	272.9	291.4	317.5	347.9	372.9
42.5°	233.7	256.6	288.1	314.2	337.0
45°	200.0	222.9	258.7	281.6	301.1
47.5°	175.0	193.5	228.3	247.9	264.2
50°	156.6	170.7	202.2	216.3	227.2
52.5°	141.3	155.5	177.2	187.0	190.3
55°	127.2	141.3	154.4	157.6	155.5
57.5°	113.1	128.3	135.9	132.6	132.6
60°	101.1	117.4	119.6	115.2	115.2
62.5°	89.1	105.5	105.5	100.0	100.0
65°	78.3	93.5	91.3	87.0	85.9
67.5°	68.5	82.6	79.4	75.0	73.9
70°	58.7	71.8	68.5	63.1	62.0
72.5°	50.0	62.0	57.6	53.3	51.1
75°	41.3	51.1	48.9	43.5	41.3
77.5°	33.7	41.3	39.1	34.8	32.6
80°	26.1	32.6	31.5	27.2	25.0
82.5°	19.6	25.0	23.9	20.7	17.4
85°	13.0	17.4	16.3	14.1	10.9
87.5°	6.5	12.0	10.9	9.8	5.4
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	15.85	17.30	16.22	17.61	17.92	16.21	17.65	16.58	17.97	18.28
	3H	17.40	18.69	17.78	19.02	19.38	17.56	18.85	17.94	19.18	19.54
	4H	17.97	19.18	18.37	19.53	19.91	18.04	19.25	18.44	19.60	19.98
	6H	18.40	19.52	18.81	19.88	20.28	18.40	19.51	18.81	19.88	20.27
	8H	18.55	19.61	18.98	20.00	20.41	18.51	19.57	18.94	19.96	20.36
	12H	18.67	19.68	19.10	20.07	20.50	18.59	19.60	19.02	19.98	20.41
4H	2H	16.44	17.65	16.84	18.00	18.38	16.73	17.93	17.13	18.28	18.66
	3H	18.26	19.26	18.67	19.67	20.07	18.30	19.30	18.71	19.70	20.10
	4H	19.01	19.91	19.44	20.33	20.77	18.90	19.81	19.34	20.22	20.66
	6H	19.60	20.38	20.05	20.82	21.28	19.39	20.17	19.85	20.61	21.08
	8H	19.81	20.54	20.27	20.98	21.45	19.55	20.28	20.02	20.73	21.20
	12H	19.97	20.63	20.46	21.11	21.58	19.67	20.32	20.16	20.80	21.28
8H	4H	19.29	20.02	19.76	20.47	20.94	19.21	19.94	19.67	20.38	20.85
	6H	20.05	20.65	20.55	21.15	21.63	19.82	20.43	20.32	20.92	21.40
	8H	20.37	20.92	20.89	21.43	21.92	20.07	20.62	20.59	21.13	21.62
	12H	20.66	21.14	21.17	21.63	22.20	20.28	20.76	20.80	21.26	21.82
12H	4H	19.31	19.97	19.80	20.44	20.92	19.24	19.89	19.72	20.37	20.84
	6H	20.11	20.65	20.63	21.16	21.65	19.90	20.44	20.42	20.96	21.44
	8H	20.51	20.99	21.02	21.48	22.05	20.22	20.70	20.73	21.19	21.76