

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: P1057805

Luminaire Tested: S122RDRP-S1005D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1057805  
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-S1005D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

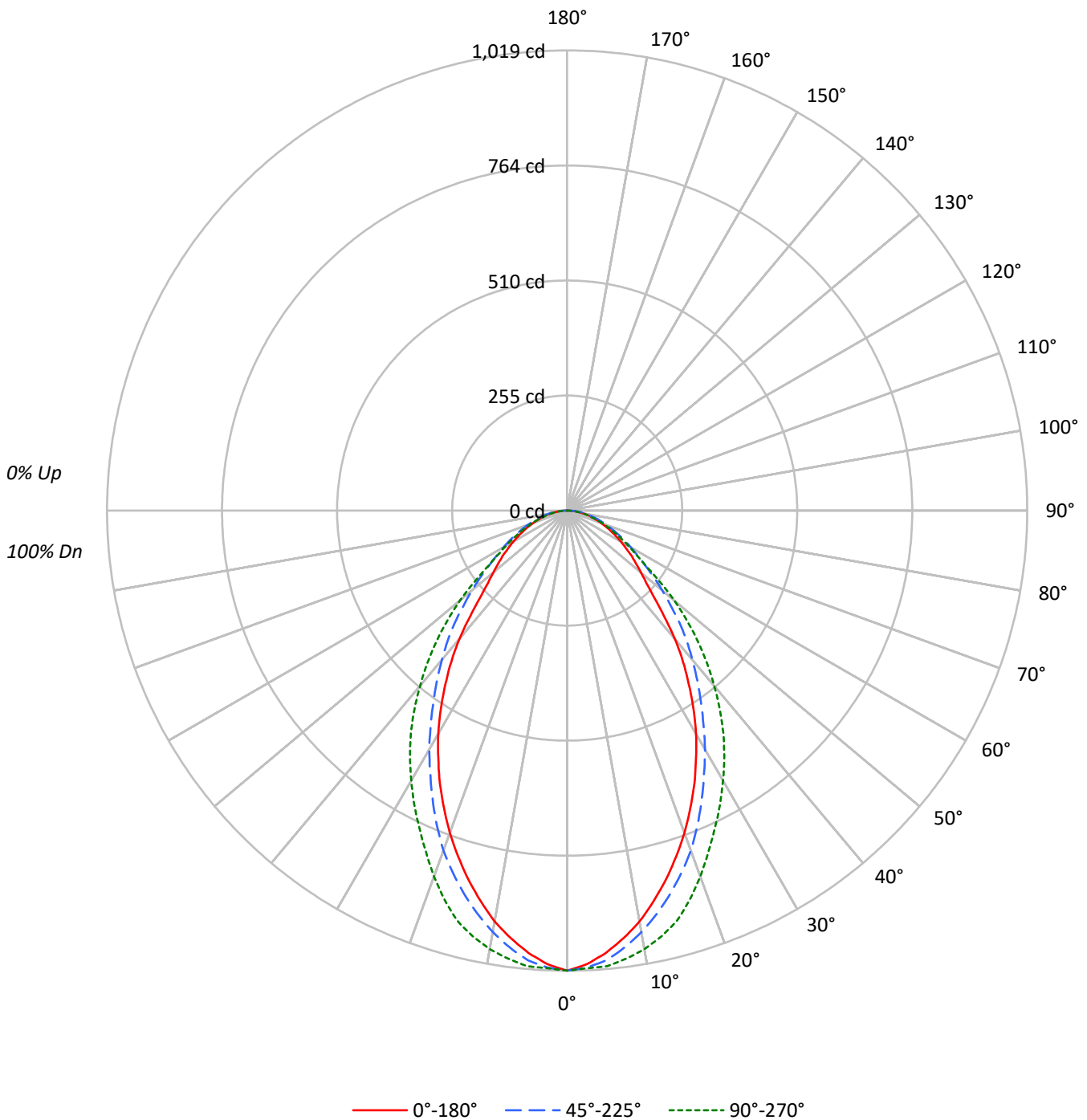
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1658.8 lumens  
Efficiency: N/A  
Efficacy: 39.7 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): 41.8  
Input Voltage (V): 120  
Input Current (Ain): 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					87			
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76					76			
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66					66			
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59					59			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52					52			
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47					47			
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43					43			
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39					39			
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36					36			
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33					33			

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

	0°	45°	90°
0°	18798	18798	18798
5°	18212	18514	18760
10°	17313	17757	18477
15°	16156	16805	17963
20°	14922	15735	16927
25°	13576	14358	15773
30°	12160	13010	14710
35°	10592	11624	13588
40°	8939	10399	12215
45°	7098	9183	10686
50°	6112	7894	8870
55°	5566	6753	6801
60°	5074	6001	5783
65°	4650	5423	5100
70°	4305	5023	4548
75°	4007	4741	4007
80°	3772	4559	3613
85°	3747	4700	3133

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10686 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.0	5.7
10°-20°	248.6	15.0
20°-30°	327.1	19.7
30°-40°	329.0	19.8
40°-50°	266.6	16.1
50°-60°	183.6	11.1
60°-70°	120.2	7.2
70°-80°	67.0	4.0
80°-90°	22.7	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°	669.8	40.4
0°-40°	998.7	60.2
0°-60°	1448.9	87.4
0°-90°	1658.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1658.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1019	1019	1019	1019	1019	
5°	983	1002	1000	1004	1013	92
15°	846	866	880	912	940	237
25°	667	684	705	736	775	306
35°	470	492	516	562	603	293
45°	272	303	352	383	410	215
55°	173	192	210	214	211	155
65°	106	127	124	118	117	106
75°	56	70	66	59	56	60
85°	18	24	22	19	15	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1018.7	1018.7	1018.7	1018.7	1018.7
2.5°	1005.4	1023.1	1012.8	1012.8	1014.2
5°	983.2	1002.4	999.5	1003.9	1012.8
7.5°	955.1	975.8	975.8	989.1	1000.9
10°	924.0	944.7	947.7	968.4	986.1
12.5°	885.6	906.3	915.2	941.8	965.4
15°	845.7	866.4	879.7	912.2	940.3
17.5°	802.8	823.5	841.3	875.3	903.3
20°	759.9	779.2	801.3	830.9	862.0
22.5°	712.6	733.3	754.0	782.1	817.6
25°	666.8	684.5	705.2	736.3	774.7
27.5°	618.0	637.2	656.4	693.4	733.3
30°	570.7	589.9	610.6	649.1	690.4
32.5°	520.4	541.1	561.8	604.7	647.6
35°	470.2	492.3	516.0	561.8	603.2
37.5°	421.4	445.0	473.1	520.4	555.9
40°	371.1	396.2	431.7	473.1	507.1
42.5°	317.9	348.9	391.8	427.3	458.3
45°	272.0	303.1	351.9	382.9	409.5
47.5°	238.0	263.2	310.5	337.1	359.3
50°	212.9	232.1	275.0	294.2	309.0
52.5°	192.2	211.4	241.0	254.3	258.7
55°	173.0	192.2	209.9	214.4	211.4
57.5°	153.8	174.5	184.8	180.4	180.4
60°	137.5	159.7	162.6	156.7	156.7
62.5°	121.2	143.4	143.4	136.0	136.0
65°	106.5	127.1	124.2	118.3	116.8
67.5°	93.1	112.4	107.9	102.0	100.5
70°	79.8	97.6	93.1	85.8	84.3
72.5°	68.0	84.3	78.4	72.4	69.5
75°	56.2	69.5	66.5	59.1	56.2
77.5°	45.8	56.2	53.2	47.3	44.4
80°	35.5	44.4	42.9	37.0	34.0
82.5°	26.6	34.0	32.5	28.1	23.7
85°	17.7	23.7	22.2	19.2	14.8
87.5°	8.9	16.3	14.8	13.3	7.4
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	16.92	18.36	17.29	18.68	18.99	17.28	18.72	17.65	19.04	19.35
	3H	18.47	19.76	18.85	20.09	20.45	18.63	19.92	19.01	20.25	20.61
	4H	19.04	20.25	19.44	20.60	20.98	19.11	20.32	19.51	20.67	21.05
	6H	19.47	20.58	19.88	20.95	21.34	19.47	20.58	19.88	20.95	21.34
	8H	19.62	20.68	20.05	21.07	21.48	19.58	20.64	20.01	21.03	21.43
	12H	19.74	20.75	20.17	21.13	21.56	19.66	20.67	20.09	21.05	21.48
4H	2H	17.51	18.72	17.91	19.07	19.45	17.80	19.01	18.20	19.35	19.73
	3H	19.33	20.33	19.74	20.73	21.14	19.37	20.37	19.78	20.77	21.17
	4H	20.08	20.98	20.51	21.40	21.84	19.97	20.87	20.41	21.29	21.73
	6H	20.66	21.45	21.12	21.89	22.35	20.46	21.24	20.91	21.68	22.14
	8H	20.87	21.61	21.34	22.05	22.52	20.62	21.35	21.09	21.80	22.27
	12H	21.04	21.69	21.53	22.17	22.65	20.74	21.39	21.23	21.87	22.35
8H	4H	20.36	21.09	20.83	21.54	22.01	20.27	21.01	20.74	21.45	21.92
	6H	21.12	21.72	21.62	22.22	22.69	20.89	21.50	21.39	21.99	22.47
	8H	21.44	21.99	21.96	22.50	22.99	21.14	21.68	21.66	22.20	22.69
	12H	21.73	22.21	22.24	22.70	23.27	21.35	21.83	21.86	22.33	22.89
12H	4H	20.38	21.03	20.87	21.51	21.99	20.31	20.96	20.79	21.44	21.91
	6H	21.18	21.72	21.70	22.23	22.72	20.97	21.51	21.49	22.02	22.51
	8H	21.58	22.06	22.09	22.55	23.12	21.29	21.77	21.80	22.26	22.83