

Scaled data based on original data using  
LM-79-2019 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: S122RDR-S1005D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
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: S122RDR-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: -

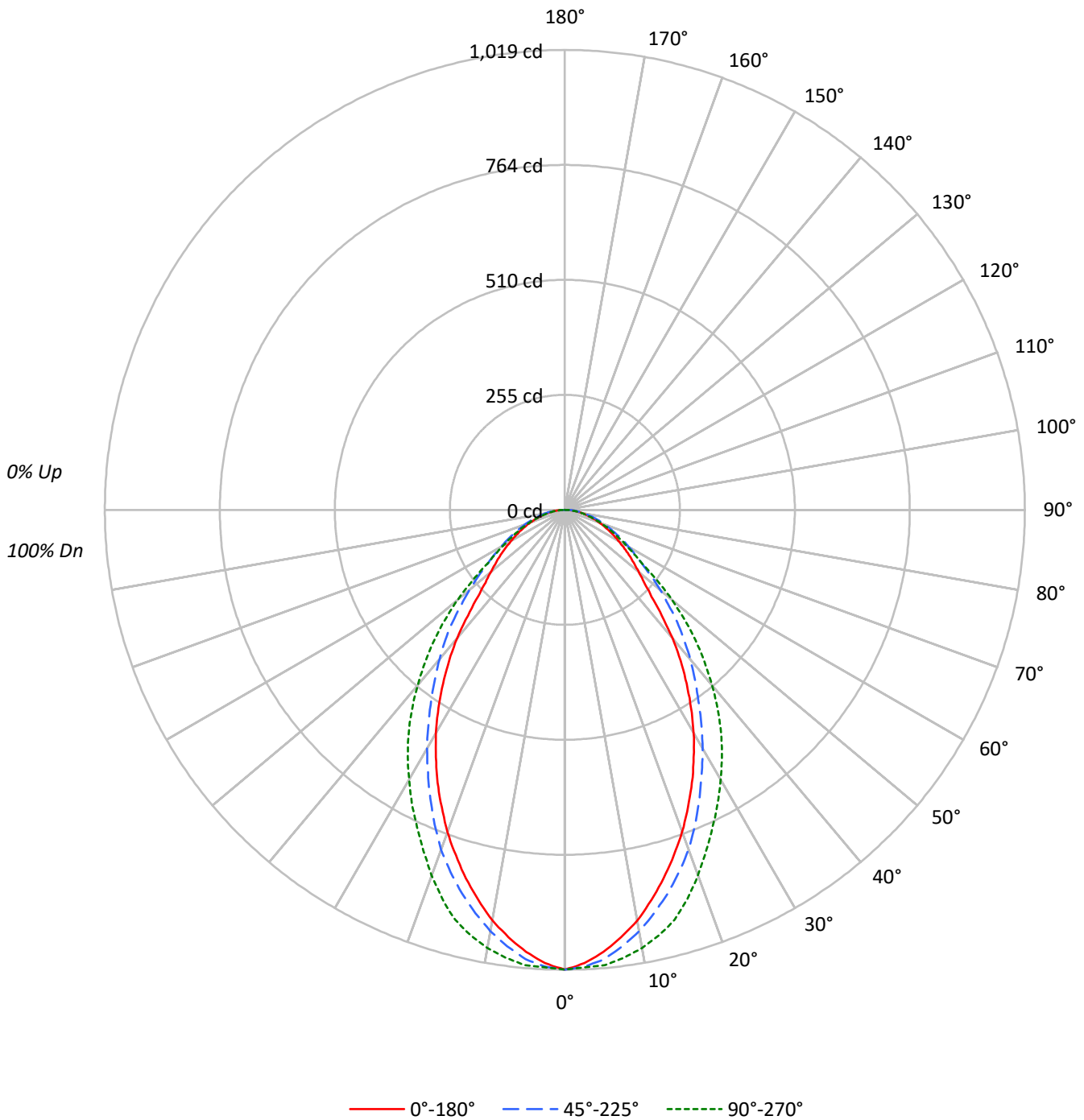
**Summary**

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
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	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°	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

(END OF REPORT)