

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: P1057800

Luminaire Tested: S122RDR-S1005D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057800  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S1005D835-X4F0-XX-UDD-BVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

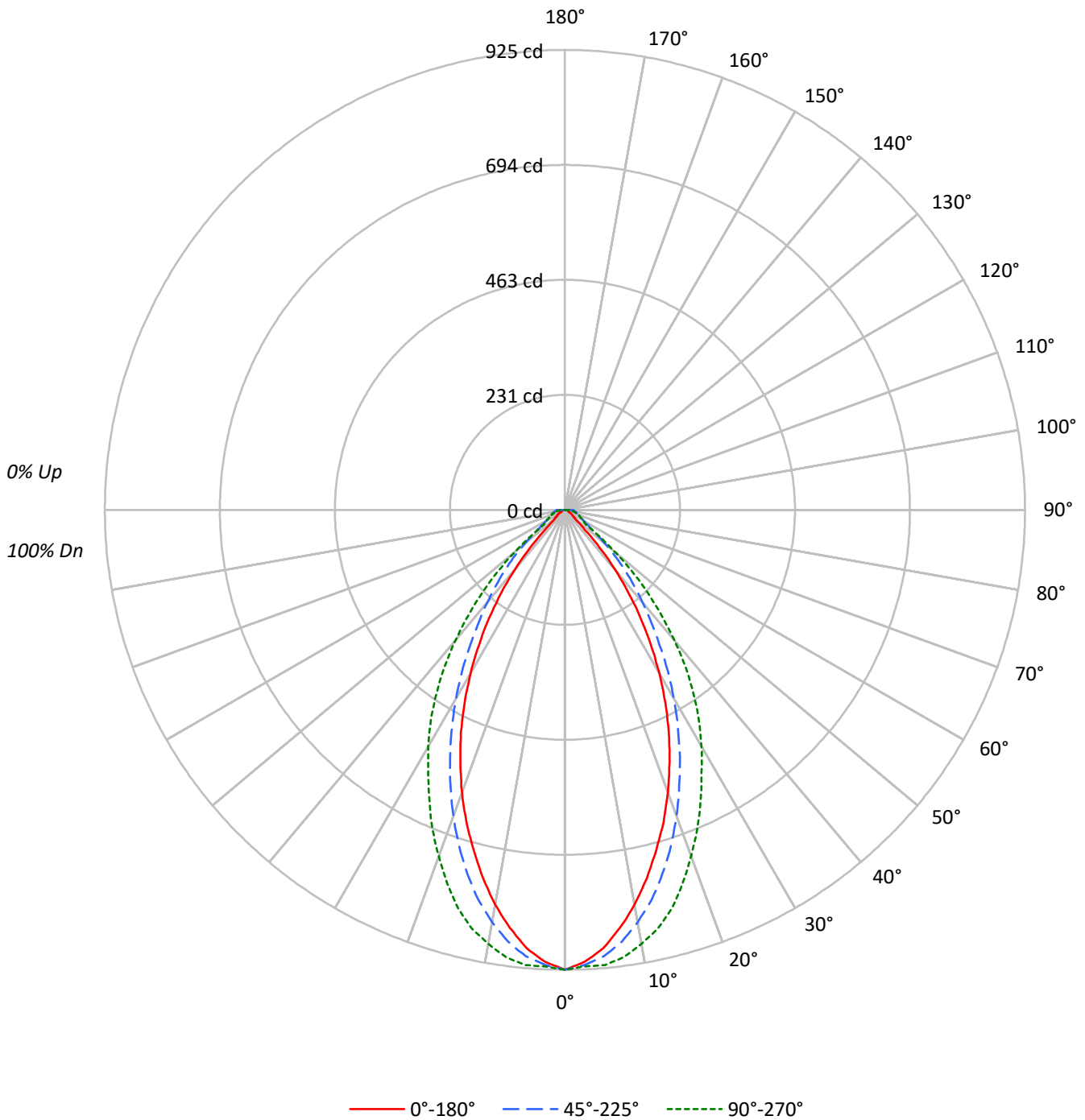
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1006.7 lumens  
Efficiency: N/A  
Efficacy: 24.1 lumens/watt  
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91  
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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56				
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42				

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

	0°	45°	90°
0°	17067	17067	17067
5°	16391	16693	17023
10°	15111	15777	16609
15°	13540	14475	15860
20°	11884	12874	14559
25°	10064	11119	13136
30°	8071	9332	11698
35°	5967	7467	10135
40°	3743	5846	8233
45°	1467	4402	6101
50°	723	2974	3738
55°	573	1953	1666
60°	435	1583	1528
65°	323	1485	1485
70°	399	1516	1516
75°	421	1690	1583
80°	627	2200	1732
85°	1249	3769	2498

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 87.5°  
 Luminance: 6895 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.5	8.4
10°-20°	213.6	21.2
20°-30°	255.5	25.4
30°-40°	215.0	21.4
40°-50°	122.4	12.2
50°-60°	48.3	4.8
60°-70°	30.4	3.0
70°-80°	22.6	2.2
80°-90°	14.4	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°	553.5	55.0
0°-40°	768.6	76.3
0°-60°	939.3	93.3
0°-90°	1006.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1006.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	925	925	925	925	925	
5°	885	904	901	912	919	82
15°	709	734	758	802	830	198
25°	494	516	546	602	645	225
35°	265	289	332	402	450	164
45°	56	99	169	212	234	53
55°	18	38	61	62	52	16
65°	7	34	34	33	34	8
75°	6	24	24	22	22	6
85°	6	16	18	16	12	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	924.9	924.9	924.9	924.9	924.9
2.5°	910.1	926.4	916.0	917.5	919.0
5°	884.9	904.2	901.2	911.6	919.0
7.5°	847.9	868.7	876.0	893.8	907.1
10°	806.5	830.2	842.0	870.1	886.4
12.5°	759.1	785.8	803.5	839.1	862.7
15°	708.8	734.0	757.7	802.1	830.2
17.5°	658.5	683.7	708.8	757.7	787.3
20°	605.2	628.9	655.6	707.4	741.4
22.5°	549.0	574.2	600.8	654.1	695.5
25°	494.3	516.5	546.1	602.3	645.2
27.5°	436.5	458.7	491.3	549.0	594.9
30°	378.8	401.0	438.0	497.2	549.0
32.5°	321.1	344.8	384.8	449.9	501.7
35°	264.9	288.6	331.5	402.5	449.9
37.5°	210.1	236.8	284.1	353.7	398.1
40°	155.4	186.5	242.7	304.8	341.8
42.5°	103.6	142.1	204.2	256.0	287.1
45°	56.2	99.1	168.7	211.6	233.8
47.5°	31.1	63.6	134.7	168.7	182.0
50°	25.2	44.4	103.6	128.7	130.2
52.5°	20.7	40.0	77.0	91.7	84.3
55°	17.8	38.5	60.7	62.2	51.8
57.5°	14.8	37.0	50.3	44.4	44.4
60°	11.8	37.0	42.9	40.0	41.4
62.5°	8.9	37.0	38.5	35.5	37.0
65°	7.4	34.0	34.0	32.6	34.0
67.5°	7.4	31.1	31.1	29.6	31.1
70°	7.4	29.6	28.1	28.1	28.1
72.5°	5.9	26.6	26.6	25.2	25.2
75°	5.9	23.7	23.7	22.2	22.2
77.5°	5.9	22.2	22.2	20.7	19.2
80°	5.9	19.2	20.7	19.2	16.3
82.5°	5.9	17.8	19.2	17.8	13.3
85°	5.9	16.3	17.8	16.3	11.8
87.5°	4.4	16.3	16.3	13.3	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)