

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: P1057966

Luminaire Tested: S122RDR-S485D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057966
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: S122RDR-S485D835-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, 80 CRI LEDS
Ballast/Driver: -

Summary

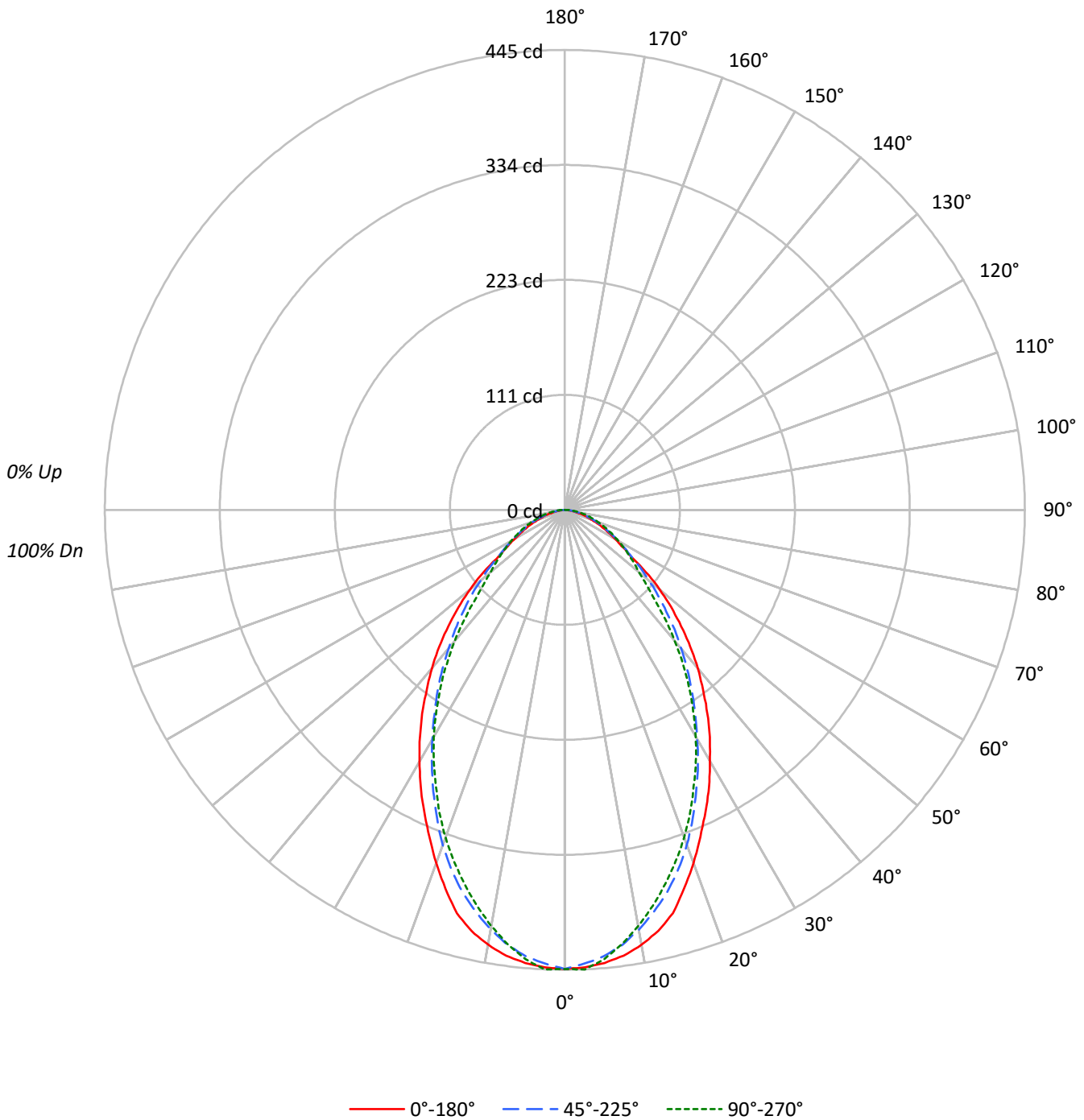
Lumens per Lamp: N/A
Luminaire Lumens: 674.7 lumens
Efficiency: N/A
Efficacy: 34.4 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8198	8198	8198
5°	8150	8033	8085
10°	8006	7727	7662
15°	7716	7311	7162
20°	7140	6779	6625
25°	6554	6122	6006
30°	5983	5457	5397
35°	5418	4830	4717
40°	4822	4208	3987
45°	4154	3619	3194
50°	3433	3046	2681
55°	2480	2525	2413
60°	2063	2166	2192
65°	1760	1886	2008
70°	1451	1678	1834
75°	1212	1412	1661
80°	903	1126	1498
85°	296	593	1355

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4154 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.1	6.1
10°-20°	108.1	16.0
20°-30°	140.0	20.7
30°-40°	137.3	20.3
40°-50°	108.1	16.0
50°-60°	70.8	10.5
60°-70°	43.1	6.4
70°-80°	21.6	3.2
80°-90°	4.6	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°	289.2	42.9
0°-40°	426.4	63.2
0°-60°	605.4	89.7
0°-90°	674.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	674.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	440	440	434	436	436	42
15°	404	398	383	378	375	113
25°	322	311	301	299	295	148
35°	240	227	214	214	209	150
45°	159	149	139	129	122	123
55°	77	81	78	76	75	73
65°	40	41	43	45	46	40
75°	17	18	20	23	23	18
85°	1	2	3	5	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	444.3	444.3	444.3	444.3	444.3
2.5°	442.9	443.6	439.3	443.6	445.0
5°	440.0	440.0	433.7	436.5	436.5
7.5°	435.1	434.4	424.5	424.5	423.8
10°	427.3	424.5	412.4	410.3	408.9
12.5°	417.4	412.4	398.3	394.7	392.6
15°	403.9	398.3	382.7	377.8	374.9
17.5°	384.1	378.5	365.0	359.4	356.5
20°	363.6	355.1	345.2	340.3	337.4
22.5°	342.4	332.5	323.3	319.8	316.9
25°	321.9	311.3	300.7	299.2	295.0
27.5°	302.1	289.3	278.7	278.0	274.5
30°	280.8	267.4	256.1	256.8	253.3
32.5°	261.0	248.3	234.9	235.6	231.3
35°	240.5	227.1	214.4	213.6	209.4
37.5°	219.3	206.6	194.5	191.7	187.5
40°	200.2	187.5	174.7	169.8	165.5
42.5°	179.7	168.4	157.0	149.3	143.6
45°	159.2	149.3	138.7	128.8	122.4
47.5°	139.4	131.6	122.4	110.4	106.1
50°	119.6	113.9	106.1	95.5	93.4
52.5°	99.0	96.9	92.0	84.9	84.2
55°	77.1	81.4	78.5	75.7	75.0
57.5°	65.1	65.8	67.9	67.2	67.2
60°	55.9	55.9	58.7	59.4	59.4
62.5°	47.4	48.1	50.9	52.3	52.3
65°	40.3	41.0	43.2	45.3	46.0
67.5°	33.2	34.7	36.8	38.9	39.6
70°	26.9	28.3	31.1	33.2	34.0
72.5°	21.9	22.6	25.5	27.6	28.3
75°	17.0	17.7	19.8	22.6	23.3
77.5°	12.0	13.4	15.6	17.7	19.1
80°	8.5	9.2	10.6	13.4	14.1
82.5°	5.0	5.7	7.1	9.2	9.9
85°	1.4	2.1	2.8	5.0	6.4
87.5°	0.0	0.0	0.0	1.4	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)