

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: P1057967

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057967
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-S485D835-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

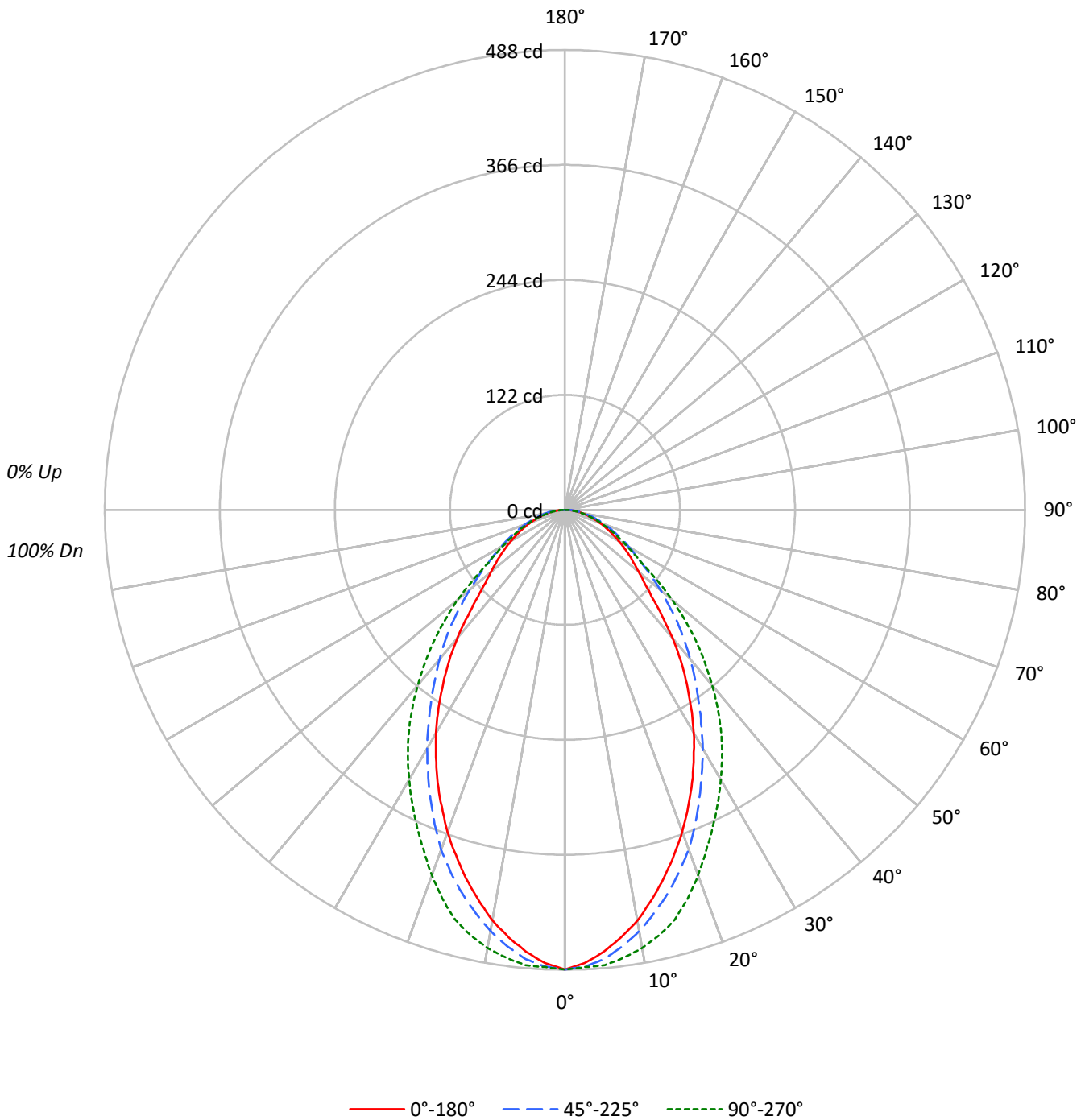
Lumens per Lamp: N/A
Luminaire Lumens: 794.3 lumens
Efficiency: N/A
Efficacy: 40.5 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	9001	9001	9001
5°	8721	8865	8982
10°	8291	8503	8848
15°	7735	8046	8600
20°	7146	7535	8104
25°	6501	6876	7554
30°	5823	6230	7044
35°	5071	5566	6506
40°	4280	4979	5849
45°	3400	4397	5117
50°	2925	3781	4249
55°	2664	3233	3256
60°	2428	2875	2768
65°	2227	2598	2441
70°	2061	2406	2180
75°	1918	2274	1918
80°	1806	2178	1732
85°	1800	2244	1503

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5117 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	5.7
10°-20°	119.0	15.0
20°-30°	156.6	19.7
30°-40°	157.5	19.8
40°-50°	127.7	16.1
50°-60°	87.9	11.1
60°-70°	57.6	7.2
70°-80°	32.1	4.0
80°-90°	10.9	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°	320.7	40.4
0°-40°	478.2	60.2
0°-60°	693.8	87.3
0°-90°	794.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	794.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	488	488	488	488	488	
5°	471	480	479	481	485	44
15°	405	415	421	437	450	113
25°	319	328	338	353	371	146
35°	225	236	247	269	289	140
45°	130	145	168	183	196	103
55°	83	92	100	103	101	74
65°	51	61	60	57	56	51
75°	27	33	32	28	27	29
85°	8	11	11	9	7	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	487.8	487.8	487.8	487.8	487.8
2.5°	481.4	489.9	484.9	484.9	485.6
5°	470.8	480.0	478.6	480.7	484.9
7.5°	457.3	467.2	467.2	473.6	479.3
10°	442.5	452.4	453.8	463.7	472.2
12.5°	424.1	434.0	438.2	451.0	462.3
15°	404.9	414.8	421.2	436.8	450.2
17.5°	384.4	394.3	402.8	419.1	432.5
20°	363.9	373.1	383.7	397.9	412.7
22.5°	341.2	351.1	361.0	374.5	391.5
25°	319.3	327.8	337.7	352.6	371.0
27.5°	295.9	305.1	314.3	332.0	351.1
30°	273.3	282.5	292.4	310.8	330.6
32.5°	249.2	259.1	269.0	289.5	310.1
35°	225.1	235.7	247.1	269.0	288.8
37.5°	201.8	213.1	226.5	249.2	266.2
40°	177.7	189.7	206.7	226.5	242.8
42.5°	152.2	167.1	187.6	204.6	219.5
45°	130.3	145.1	168.5	183.4	196.1
47.5°	114.0	126.0	148.7	161.4	172.0
50°	101.9	111.1	131.7	140.9	148.0
52.5°	92.0	101.2	115.4	121.8	123.9
55°	82.8	92.0	100.5	102.7	101.2
57.5°	73.6	83.5	88.5	86.4	86.4
60°	65.8	76.5	77.9	75.0	75.0
62.5°	58.1	68.7	68.7	65.1	65.1
65°	51.0	60.9	59.5	56.6	55.9
67.5°	44.6	53.8	51.7	48.8	48.1
70°	38.2	46.7	44.6	41.1	40.4
72.5°	32.6	40.4	37.5	34.7	33.3
75°	26.9	33.3	31.9	28.3	26.9
77.5°	21.9	26.9	25.5	22.7	21.2
80°	17.0	21.2	20.5	17.7	16.3
82.5°	12.7	16.3	15.6	13.5	11.3
85°	8.5	11.3	10.6	9.2	7.1
87.5°	4.2	7.8	7.1	6.4	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)