

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: P1058007

Luminaire Tested: S122RDR-S485D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058007
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-S485D935-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, 90 CRI LEDS
Ballast/Driver: -

Summary

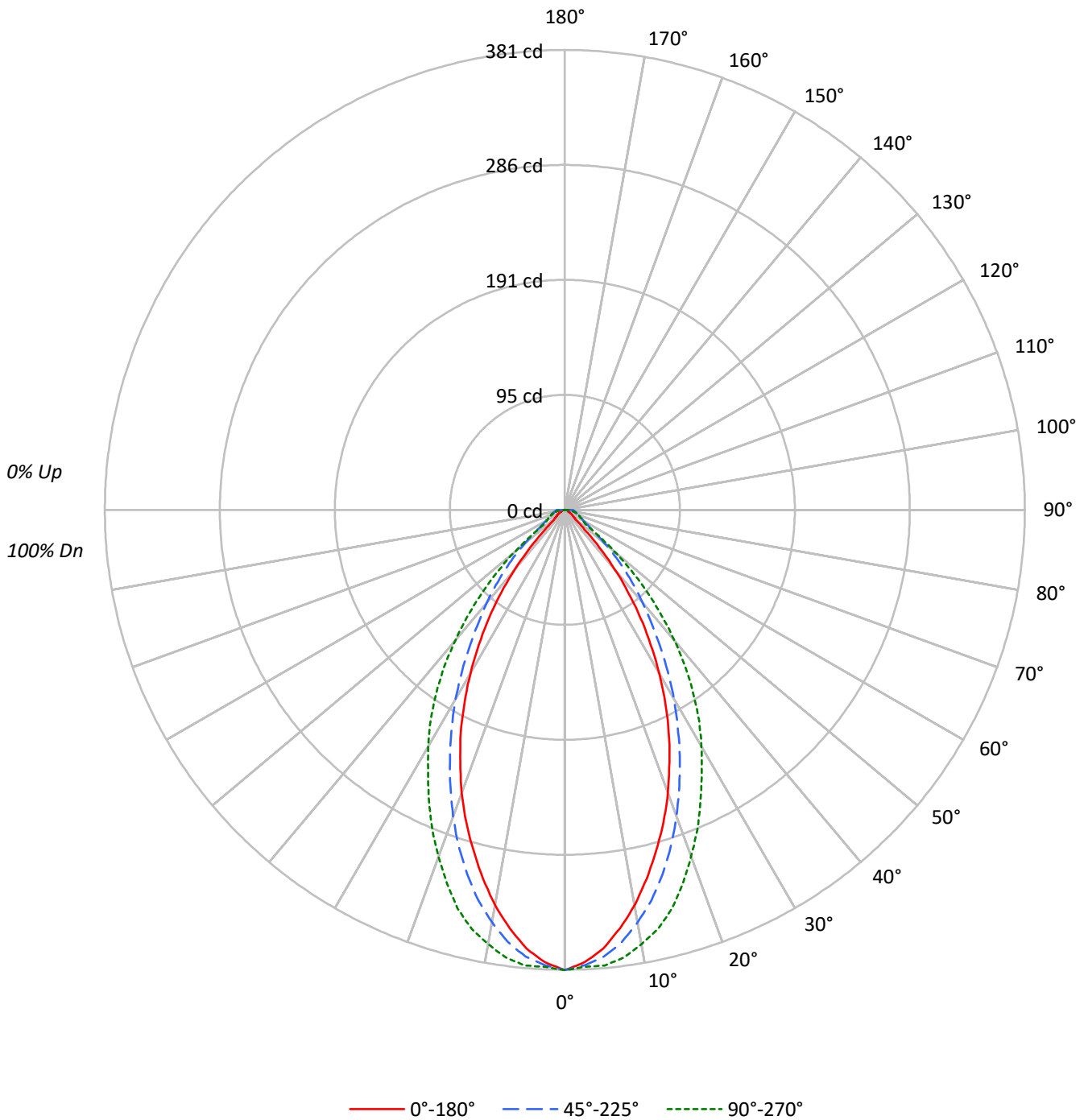
Lumens per Lamp: N/A
Luminaire Lumens: 415.0 lumens
Efficiency: N/A
Efficacy: 21.2 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1058007

CATALOG NUMBER: S122RDR-S485D935-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1058007

CATALOG NUMBER: S122RDR-S485D935-X4F0-XX-UDD-BVL-W

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°	7036	7036	7036
5°	6757	6881	7018
10°	6230	6504	6847
15°	5582	5968	6539
20°	4899	5308	6003
25°	4149	4583	5416
30°	3328	3848	4822
35°	2460	3079	4179
40°	1544	2411	3394
45°	605	1814	2516
50°	299	1226	1542
55°	235	804	688
60°	181	653	631
65°	135	611	611
70°	167	626	626
75°	171	699	656
80°	255	903	712
85°	508	1546	1037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 2834 cd/sqm



TEST NUMBER: P1058007

CATALOG NUMBER: S122RDR-S485D935-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.8	8.4
10°-20°	88.1	21.2
20°-30°	105.3	25.4
30°-40°	88.7	21.4
40°-50°	50.5	12.2
50°-60°	19.9	4.8
60°-70°	12.5	3.0
70°-80°	9.3	2.2
80°-90°	5.9	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°	228.2	55.0
0°-40°	316.9	76.3
0°-60°	387.2	93.3
0°-90°	415.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	415.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	381	381	381	381	381	
5°	365	373	372	376	379	34
15°	292	303	312	331	342	82
25°	204	213	225	248	266	93
35°	109	119	137	166	186	68
45°	23	41	70	87	96	22
55°	7	16	25	26	21	7
65°	3	14	14	13	14	3
75°	2	10	10	9	9	3
85°	2	7	7	7	5	2
90°	0	0	0	0	0	



TEST NUMBER: P1058007

CATALOG NUMBER: S122RDR-S485D935-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	381.3	381.3	381.3	381.3	381.3
2.5°	375.2	381.9	377.6	378.2	378.9
5°	364.8	372.8	371.5	375.8	378.9
7.5°	349.6	358.1	361.2	368.5	374.0
10°	332.5	342.3	347.1	358.7	365.4
12.5°	313.0	324.0	331.3	345.9	355.7
15°	292.2	302.6	312.4	330.7	342.3
17.5°	271.5	281.9	292.2	312.4	324.6
20°	249.5	259.3	270.3	291.6	305.7
22.5°	226.3	236.7	247.7	269.7	286.7
25°	203.8	212.9	225.1	248.3	266.0
27.5°	180.0	189.1	202.5	226.3	245.3
30°	156.2	165.3	180.6	205.0	226.3
32.5°	132.4	142.1	158.6	185.5	206.8
35°	109.2	119.0	136.7	165.9	185.5
37.5°	86.6	97.6	117.1	145.8	164.1
40°	64.1	76.9	100.1	125.7	140.9
42.5°	42.7	58.6	84.2	105.5	118.4
45°	23.2	40.9	69.5	87.2	96.4
47.5°	12.8	26.2	55.5	69.5	75.0
50°	10.4	18.3	42.7	53.1	53.7
52.5°	8.5	16.5	31.7	37.8	34.8
55°	7.3	15.9	25.0	25.6	21.4
57.5°	6.1	15.3	20.7	18.3	18.3
60°	4.9	15.3	17.7	16.5	17.1
62.5°	3.7	15.3	15.9	14.6	15.3
65°	3.1	14.0	14.0	13.4	14.0
67.5°	3.1	12.8	12.8	12.2	12.8
70°	3.1	12.2	11.6	11.6	11.6
72.5°	2.4	11.0	11.0	10.4	10.4
75°	2.4	9.8	9.8	9.2	9.2
77.5°	2.4	9.2	9.2	8.5	7.9
80°	2.4	7.9	8.5	7.9	6.7
82.5°	2.4	7.3	7.9	7.3	5.5
85°	2.4	6.7	7.3	6.7	4.9
87.5°	1.8	6.7	6.7	5.5	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)