

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: P1057953

Luminaire Tested: S122RDR-S485D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057953
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-S485D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

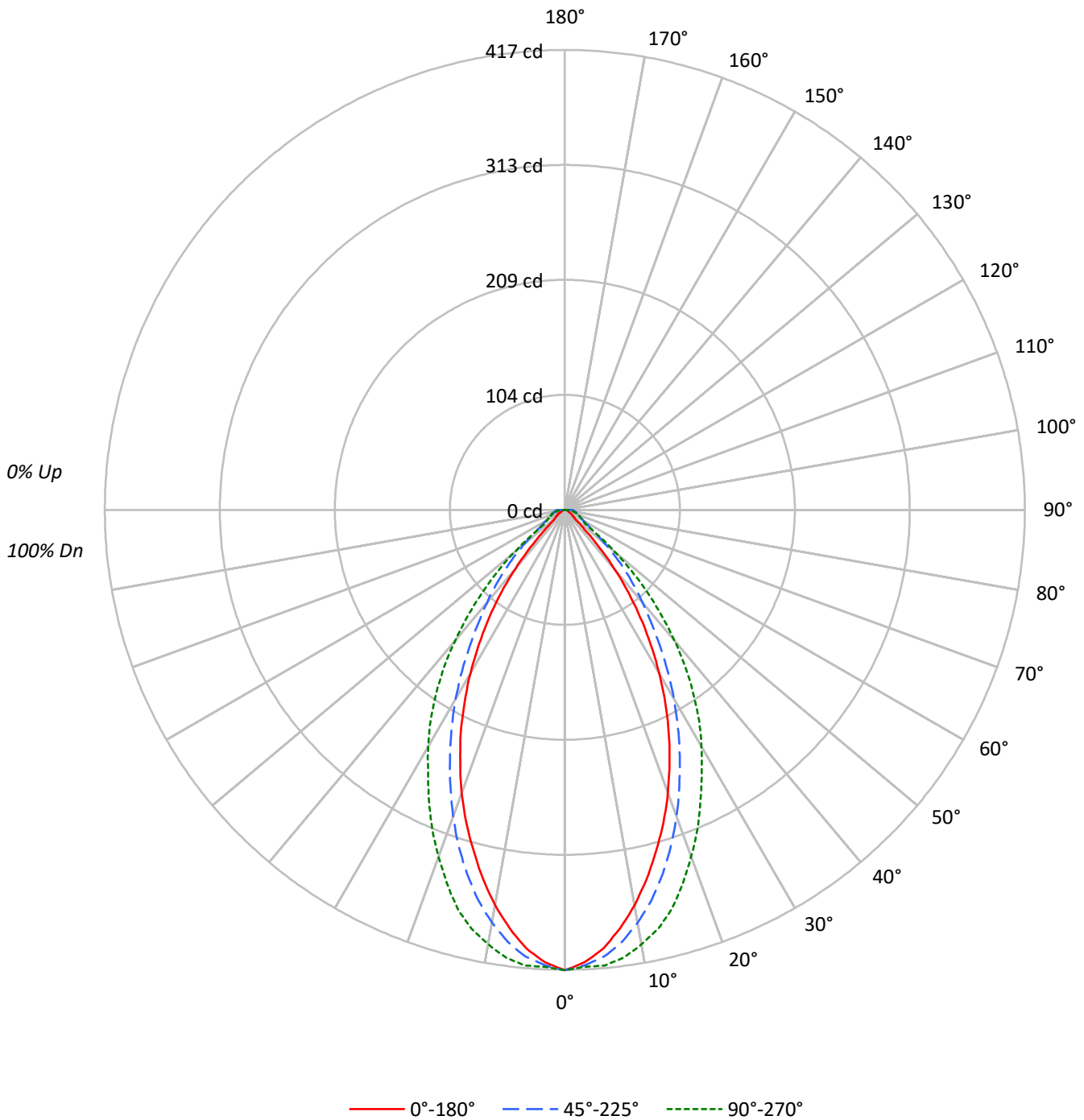
Lumens per Lamp: N/A
Luminaire Lumens: 454.3 lumens
Efficiency: N/A
Efficacy: 23.2 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	7702	7702	7702
5°	7398	7533	7681
10°	6820	7120	7495
15°	6111	6531	7158
20°	5365	5811	6570
25°	4542	5017	5929
30°	3644	4212	5280
35°	2692	3370	4573
40°	1689	2638	3717
45°	663	1986	2753
50°	327	1343	1688
55°	257	881	753
60°	196	716	690
65°	144	672	672
70°	178	685	685
75°	192	763	713
80°	287	999	776
85°	572	1694	1122

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 3088 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.1	8.4
10°-20°	96.4	21.2
20°-30°	115.3	25.4
30°-40°	97.0	21.4
40°-50°	55.2	12.2
50°-60°	21.8	4.8
60°-70°	13.7	3.0
70°-80°	10.2	2.2
80°-90°	6.5	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°	249.8	55.0
0°-40°	346.9	76.3
0°-60°	423.9	93.3
0°-90°	454.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	454.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	417	417	417	417	417	
5°	399	408	407	411	415	37
15°	320	331	342	362	375	89
25°	223	233	246	272	291	102
35°	120	130	150	182	203	74
45°	25	45	76	96	106	24
55°	8	17	27	28	23	7
65°	3	15	15	15	15	4
75°	3	11	11	10	10	3
85°	3	7	8	7	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	417.4	417.4	417.4	417.4	417.4
2.5°	410.7	418.1	413.4	414.1	414.7
5°	399.4	408.1	406.7	411.4	414.7
7.5°	382.7	392.0	395.4	403.4	409.4
10°	364.0	374.7	380.0	392.7	400.0
12.5°	342.6	354.6	362.6	378.7	389.4
15°	319.9	331.3	341.9	362.0	374.7
17.5°	297.2	308.6	319.9	341.9	355.3
20°	273.2	283.8	295.9	319.2	334.6
22.5°	247.8	259.1	271.2	295.2	313.9
25°	223.1	233.1	246.4	271.8	291.2
27.5°	197.0	207.0	221.7	247.8	268.5
30°	171.0	181.0	197.7	224.4	247.8
32.5°	144.9	155.6	173.6	203.0	226.4
35°	119.5	130.2	149.6	181.7	203.0
37.5°	94.8	106.9	128.2	159.6	179.7
40°	70.1	84.2	109.5	137.6	154.3
42.5°	46.8	64.1	92.2	115.5	129.6
45°	25.4	44.7	76.1	95.5	105.5
47.5°	14.0	28.7	60.8	76.1	82.1
50°	11.4	20.0	46.8	58.1	58.8
52.5°	9.4	18.0	34.7	41.4	38.1
55°	8.0	17.4	27.4	28.1	23.4
57.5°	6.7	16.7	22.7	20.0	20.0
60°	5.3	16.7	19.4	18.0	18.7
62.5°	4.0	16.7	17.4	16.0	16.7
65°	3.3	15.4	15.4	14.7	15.4
67.5°	3.3	14.0	14.0	13.4	14.0
70°	3.3	13.4	12.7	12.7	12.7
72.5°	2.7	12.0	12.0	11.4	11.4
75°	2.7	10.7	10.7	10.0	10.0
77.5°	2.7	10.0	10.0	9.4	8.7
80°	2.7	8.7	9.4	8.7	7.3
82.5°	2.7	8.0	8.7	8.0	6.0
85°	2.7	7.3	8.0	7.3	5.3
87.5°	2.0	7.3	7.3	6.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)