

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: P1057975

Luminaire Tested: S122RDR-S485D840-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057975
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-S485D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

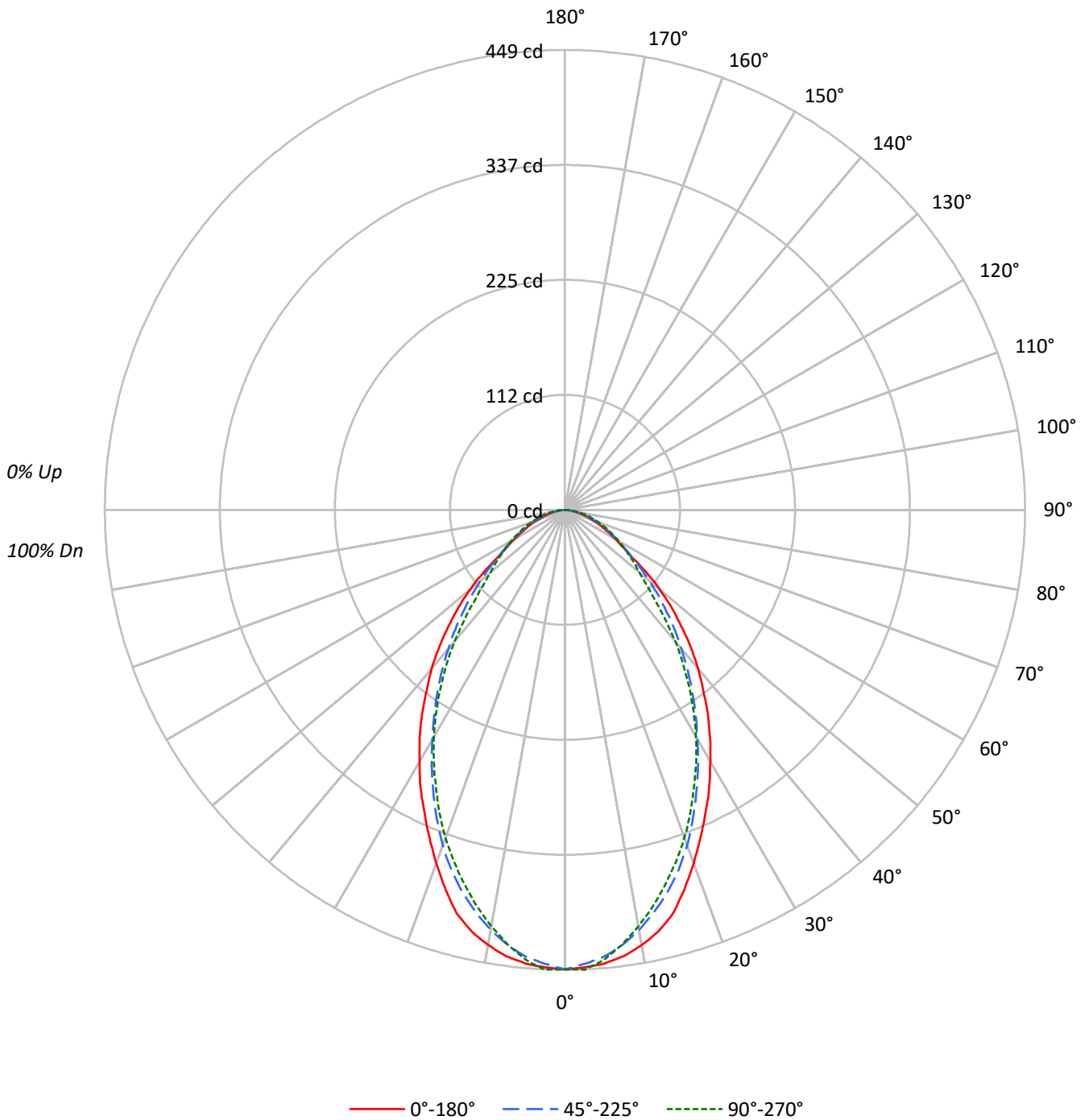
Lumens per Lamp: N/A
Luminaire Lumens: 681.4 lumens
Efficiency: N/A
Efficacy: 34.8 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8278	8278	8278
5°	8232	8111	8165
10°	8085	7804	7737
15°	7792	7383	7233
20°	7211	6845	6692
25°	6619	6181	6065
30°	6043	5510	5450
35°	5472	4877	4764
40°	4871	4252	4028
45°	4194	3653	3225
50°	3465	3077	2707
55°	2506	2551	2435
60°	2081	2188	2214
65°	1777	1904	2026
70°	1462	1694	1851
75°	1219	1426	1683
80°	914	1137	1520
85°	296	614	1355

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4194 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.5	6.1
10°-20°	109.2	16.0
20°-30°	141.3	20.7
30°-40°	138.6	20.3
40°-50°	109.1	16.0
50°-60°	71.5	10.5
60°-70°	43.6	6.4
70°-80°	21.8	3.2
80°-90°	4.7	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°	292.0	42.9
0°-40°	430.7	63.2
0°-60°	611.3	89.7
0°-90°	681.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	681.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	449	449	449	449	449	
5°	444	444	438	441	441	42
15°	408	402	386	382	379	114
25°	325	314	304	302	298	149
35°	243	229	216	216	212	151
45°	161	151	140	130	124	124
55°	78	82	79	76	76	74
65°	41	41	44	46	46	41
75°	17	18	20	23	24	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°	448.6	448.6	448.6	448.6	448.6
2.5°	447.2	447.9	443.6	447.9	449.4
5°	444.4	444.4	437.9	440.8	440.8
7.5°	439.4	438.6	428.6	428.6	427.9
10°	431.5	428.6	416.5	414.4	412.9
12.5°	421.5	416.5	402.2	398.6	396.5
15°	407.9	402.2	386.5	381.5	378.6
17.5°	387.9	382.2	368.6	362.9	360.1
20°	367.2	358.6	348.6	343.6	340.8
22.5°	345.8	335.8	326.5	322.9	320.1
25°	325.1	314.3	303.6	302.2	297.9
27.5°	305.1	292.2	281.5	280.8	277.2
30°	283.6	270.0	258.6	259.3	255.8
32.5°	263.6	250.8	237.2	237.9	233.6
35°	242.9	229.3	216.5	215.8	211.5
37.5°	221.5	208.6	196.5	193.6	189.3
40°	202.2	189.3	176.5	171.5	167.2
42.5°	181.5	170.0	158.6	150.7	145.0
45°	160.7	150.7	140.0	130.0	123.6
47.5°	140.7	132.9	123.6	111.4	107.2
50°	120.7	115.0	107.2	96.4	94.3
52.5°	100.0	97.9	92.9	85.7	85.0
55°	77.9	82.2	79.3	76.4	75.7
57.5°	65.7	66.4	68.6	67.9	67.9
60°	56.4	56.4	59.3	60.0	60.0
62.5°	47.9	48.6	51.4	52.9	52.9
65°	40.7	41.4	43.6	45.7	46.4
67.5°	33.6	35.0	37.1	39.3	40.0
70°	27.1	28.6	31.4	33.6	34.3
72.5°	22.1	22.9	25.7	27.9	28.6
75°	17.1	17.9	20.0	22.9	23.6
77.5°	12.1	13.6	15.7	17.9	19.3
80°	8.6	9.3	10.7	13.6	14.3
82.5°	5.0	5.7	7.1	9.3	10.0
85°	1.4	2.1	2.9	5.0	6.4
87.5°	0.0	0.0	0.0	1.4	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)