

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: P1058016

Luminaire Tested: S122RDR-S485D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058016
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-S485D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

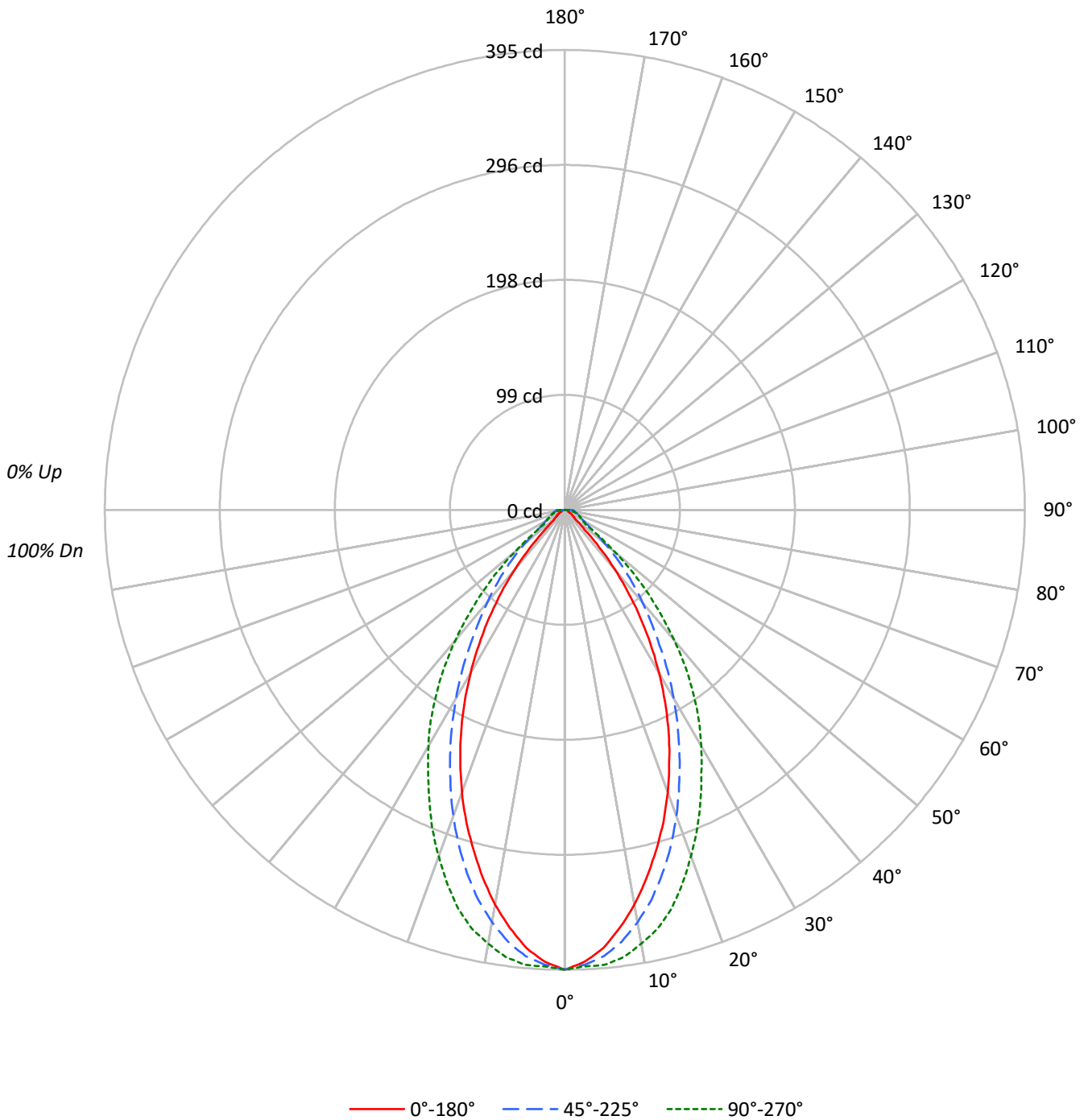
Lumens per Lamp: N/A
Luminaire Lumens: 429.8 lumens
Efficiency: N/A
Efficacy: 21.9 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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°	7287	7287	7287
5°	6998	7128	7268
10°	6453	6736	7092
15°	5783	6180	6772
20°	5074	5496	6217
25°	4296	4746	5609
30°	3447	3984	4994
35°	2548	3187	4327
40°	1597	2496	3517
45°	626	1879	2604
50°	307	1269	1596
55°	244	833	711
60°	188	675	653
65°	140	633	633
70°	173	647	647
75°	178	720	677
80°	266	935	744
85°	529	1609	1080

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 2961 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.1	8.4
10°-20°	91.2	21.2
20°-30°	109.1	25.4
30°-40°	91.8	21.4
40°-50°	52.3	12.2
50°-60°	20.6	4.8
60°-70°	13.0	3.0
70°-80°	9.6	2.2
80°-90°	6.2	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°	236.3	55.0
0°-40°	328.2	76.3
0°-60°	401.1	93.3
0°-90°	429.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	429.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	395	395	395	395	395	
5°	378	386	385	389	392	35
15°	303	313	324	342	354	84
25°	211	220	233	257	276	96
35°	113	123	142	172	192	70
45°	24	42	72	90	100	23
55°	8	16	26	26	22	7
65°	3	14	14	14	14	4
75°	2	10	10	10	10	3
85°	2	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°	394.9	394.9	394.9	394.9	394.9
2.5°	388.6	395.5	391.1	391.7	392.4
5°	377.8	386.1	384.8	389.2	392.4
7.5°	362.0	370.9	374.1	381.6	387.3
10°	344.4	354.5	359.5	371.5	378.5
12.5°	324.1	335.5	343.1	358.3	368.4
15°	302.7	313.4	323.5	342.5	354.5
17.5°	281.2	291.9	302.7	323.5	336.1
20°	258.4	268.5	279.9	302.0	316.6
22.5°	234.4	245.2	256.5	279.3	297.0
25°	211.0	220.5	233.1	257.2	275.5
27.5°	186.4	195.9	209.8	234.4	254.0
30°	161.8	171.2	187.0	212.3	234.4
32.5°	137.1	147.2	164.3	192.1	214.2
35°	113.1	123.2	141.5	171.9	192.1
37.5°	89.7	101.1	121.3	151.0	170.0
40°	66.3	79.6	103.6	130.2	146.0
42.5°	44.2	60.7	87.2	109.3	122.6
45°	24.0	42.3	72.0	90.4	99.8
47.5°	13.3	27.2	57.5	72.0	77.7
50°	10.7	19.0	44.2	55.0	55.6
52.5°	8.8	17.1	32.9	39.2	36.0
55°	7.6	16.4	25.9	26.5	22.1
57.5°	6.3	15.8	21.5	19.0	19.0
60°	5.1	15.8	18.3	17.1	17.7
62.5°	3.8	15.8	16.4	15.2	15.8
65°	3.2	14.5	14.5	13.9	14.5
67.5°	3.2	13.3	13.3	12.6	13.3
70°	3.2	12.6	12.0	12.0	12.0
72.5°	2.5	11.4	11.4	10.7	10.7
75°	2.5	10.1	10.1	9.5	9.5
77.5°	2.5	9.5	9.5	8.8	8.2
80°	2.5	8.2	8.8	8.2	7.0
82.5°	2.5	7.6	8.2	7.6	5.7
85°	2.5	7.0	7.6	7.0	5.1
87.5°	1.9	7.0	7.0	5.7	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)