

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: P1058022

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058022
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

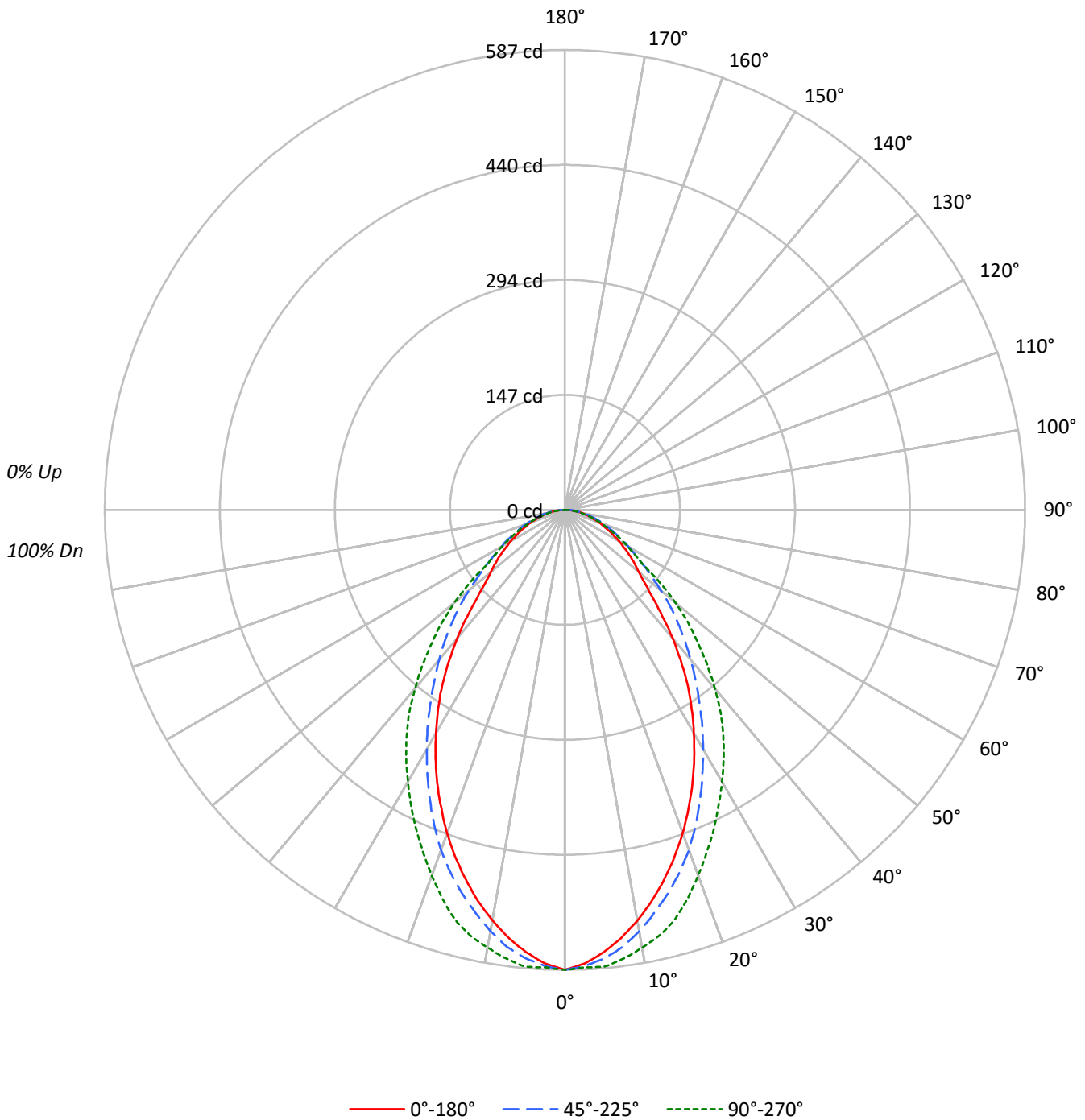
Lumens per Lamp: N/A
Luminaire Lumens: 957.2 lumens
Efficiency: N/A
Efficacy: 48.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1058022

CATALOG NUMBER: S122RDR-S485D940-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot



TEST NUMBER: P1058022

CATALOG NUMBER: S122RDR-S485D940-X4F0-XX-UDD-WVL-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10833	10833	10833
5°	10501	10641	10840
10°	9972	10232	10633
15°	9334	9684	10348
20°	8628	9074	9756
25°	7841	8303	9152
30°	7008	7506	8542
35°	6143	6726	7936
40°	5140	6008	7161
45°	4118	5321	6260
50°	3534	4584	5256
55°	3230	3899	3880
60°	2934	3447	3377
65°	2672	3087	2952
70°	2455	2827	2622
75°	2296	2609	2296
80°	2147	2412	2008
85°	2138	2541	1736

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6260 cd/sqm



TEST NUMBER: P1058022

CATALOG NUMBER: S122RDR-S485D940-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	5.7
10°-20°	143.5	15.0
20°-30°	189.3	19.8
30°-40°	190.6	19.9
40°-50°	155.1	16.2
50°-60°	105.8	11.0
60°-70°	68.6	7.2
70°-80°	37.8	3.9
80°-90°	12.3	1.3
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°	386.9	40.4
0°-40°	577.5	60.3
0°-60°	838.4	87.6
0°-90°	957.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	957.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	587	587	587	587	587	
5°	567	578	574	580	585	53
15°	489	501	507	528	542	137
25°	385	398	408	426	450	177
35°	273	287	299	324	352	169
45°	158	177	204	222	240	124
55°	100	110	121	122	121	90
65°	61	73	71	67	68	61
75°	32	40	37	33	32	34
85°	10	13	12	10	8	11
90°	0	0	0	0	0	



TEST NUMBER: P1058022

CATALOG NUMBER: S122RDR-S485D940-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	587.1	587.1	587.1	587.1	587.1
2.5°	579.5	589.0	582.7	583.3	584.6
5°	566.9	577.6	574.5	579.5	585.2
7.5°	551.1	561.9	563.1	570.7	577.6
10°	532.2	544.2	546.1	557.4	567.5
12.5°	511.4	524.6	527.1	543.6	556.8
15°	488.6	501.3	506.9	527.8	541.7
17.5°	464.6	476.6	485.5	504.4	520.2
20°	439.4	450.8	462.1	479.2	496.8
22.5°	412.2	424.9	435.6	452.6	472.9
25°	385.1	397.7	407.8	426.1	449.5
27.5°	357.3	369.9	380.0	399.6	424.9
30°	328.9	342.2	352.3	374.4	400.9
32.5°	301.1	314.4	325.8	349.1	376.9
35°	272.7	286.6	298.6	324.5	352.3
37.5°	242.4	258.2	273.4	299.2	326.4
40°	213.4	231.1	249.4	273.4	297.3
42.5°	184.3	203.9	226.6	246.8	268.9
45°	157.8	177.4	203.9	221.6	239.9
47.5°	137.0	153.4	181.8	196.3	212.8
50°	123.1	134.5	159.7	171.1	183.1
52.5°	111.7	121.2	138.9	146.5	152.8
55°	100.4	110.5	121.2	121.8	120.6
57.5°	89.0	100.4	106.1	101.6	104.2
60°	79.5	90.9	93.4	89.0	91.5
62.5°	69.4	82.1	82.1	77.7	78.9
65°	61.2	72.6	70.7	66.9	67.6
67.5°	53.0	64.4	61.2	57.4	57.4
70°	45.5	56.2	52.4	48.6	48.6
72.5°	38.5	47.3	44.8	40.4	39.8
75°	32.2	39.8	36.6	32.8	32.2
77.5°	25.9	32.2	29.7	26.5	25.3
80°	20.2	25.9	22.7	20.2	18.9
82.5°	15.2	19.6	17.0	14.5	13.3
85°	10.1	13.3	12.0	9.5	8.2
87.5°	5.1	8.8	7.6	6.3	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)