

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: P1058017

Luminaire Tested: S122RDR-S485D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058017  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S485D940-X4F0-XX-UDD-SVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

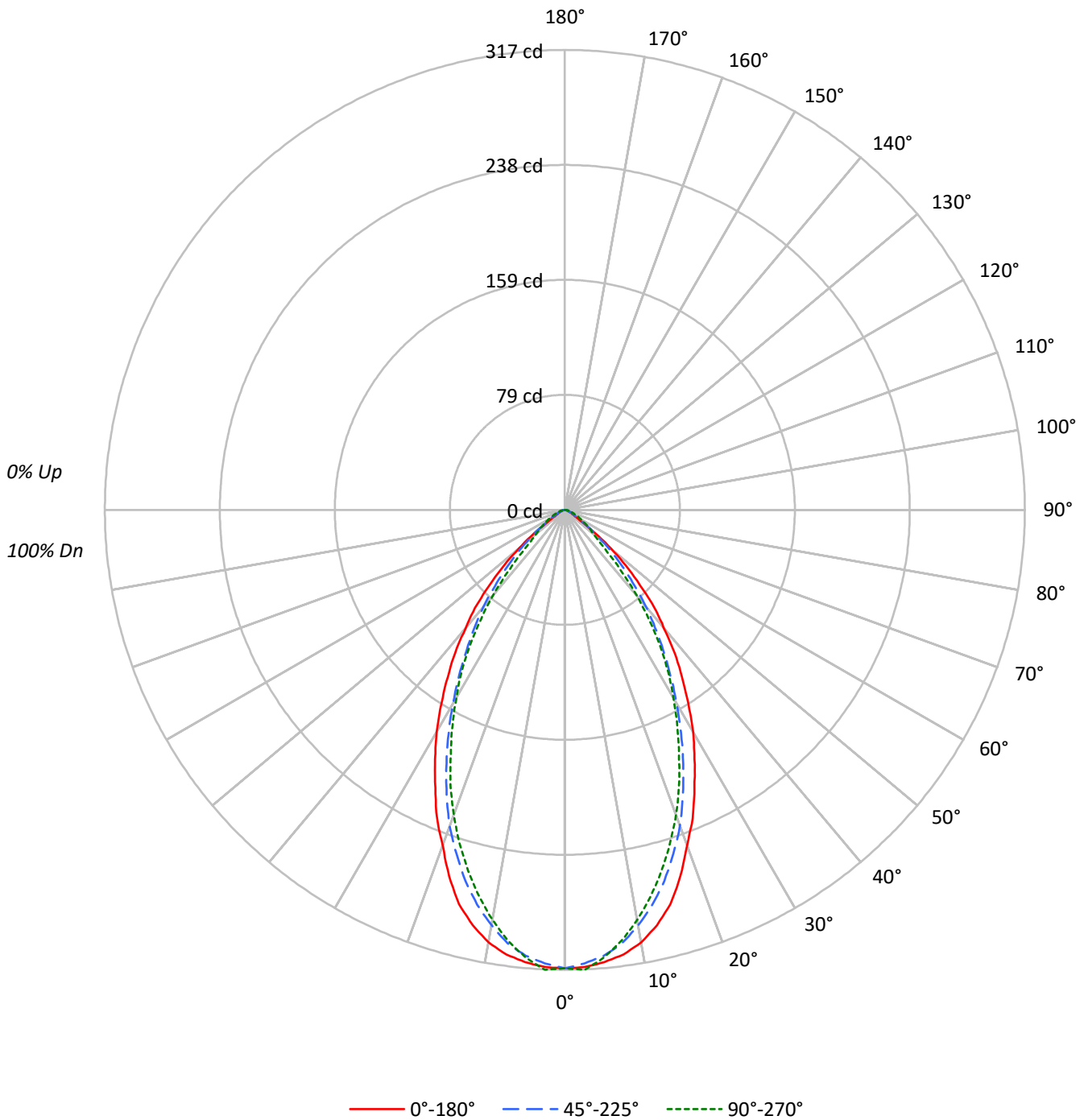
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 339.9 lumens  
Efficiency: N/A  
Efficacy: 17.3 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.85 / 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: P1058017

CATALOG NUMBER: S122RDR-S485D940-X4F0-XX-UDD-SVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1058017

CATALOG NUMBER: S122RDR-S485D940-X4F0-XX-UDD-SVL-B

**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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92				92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84				84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76				76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64				64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59				59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54				54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50				50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47				47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44				44

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5831	5831	5831
5°	5796	5712	5737
10°	5674	5449	5378
15°	5374	5060	4917
20°	4831	4558	4397
25°	4302	3929	3789
30°	3763	3279	3185
35°	3169	2658	2573
40°	2553	2096	1855
45°	1910	1514	1104
50°	1194	979	723
55°	405	528	589
60°	233	325	465
65°	166	218	358
70°	135	173	270
75°	93	135	228
80°	64	138	202
85°	0	0	127

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1910 cd/sqm



TEST NUMBER: P1058017

CATALOG NUMBER: S122RDR-S485D940-X4F0-XX-UDD-SVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.1	8.6
10°-20°	74.6	21.9
20°-30°	89.8	26.4
30°-40°	76.7	22.6
40°-50°	44.9	13.2
50°-60°	16.3	4.8
60°-70°	5.8	1.7
70°-80°	2.3	0.7
80°-90°	0.4	0.1
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°	193.5	56.9
0°-40°	270.2	79.5
0°-60°	331.4	97.5
0°-90°	339.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	339.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	316	316	316	316	316	
5°	313	314	308	310	310	30
15°	281	277	265	260	257	78
25°	211	202	193	190	186	97
35°	141	130	118	117	114	88
45°	73	66	58	49	42	56
55°	13	18	16	17	18	16
65°	4	4	5	7	8	4
75°	1	2	2	2	3	2
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



TEST NUMBER: P1058017

CATALOG NUMBER: S122RDR-S485D940-X4F0-XX-UDD-SVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	316.0	316.0	316.0	316.0	316.0
2.5°	315.4	316.0	312.9	316.0	317.3
5°	312.9	313.5	308.4	309.7	309.7
7.5°	309.1	308.4	301.5	300.2	299.6
10°	302.8	300.9	290.8	288.9	287.0
12.5°	293.3	289.5	278.8	275.6	273.1
15°	281.3	276.9	264.9	259.9	257.4
17.5°	264.9	259.9	248.5	243.5	241.0
20°	246.0	241.0	232.1	226.4	223.9
22.5°	230.2	222.0	212.6	208.8	205.6
25°	211.3	202.5	193.0	189.9	186.1
27.5°	193.6	182.9	173.5	170.9	167.8
30°	176.6	165.3	153.9	153.9	149.5
32.5°	158.3	147.6	135.6	135.0	132.5
35°	140.7	129.9	118.0	116.7	114.2
37.5°	124.3	113.5	102.2	98.4	95.2
40°	106.0	96.5	87.0	80.7	77.0
42.5°	91.5	80.7	71.3	63.7	58.7
45°	73.2	65.6	58.0	48.6	42.3
47.5°	56.8	51.7	45.4	34.7	31.5
50°	41.6	39.1	34.1	25.9	25.2
52.5°	26.5	27.8	24.6	20.2	22.1
55°	12.6	17.7	16.4	17.0	18.3
57.5°	8.2	8.8	12.0	13.9	15.1
60°	6.3	6.3	8.8	11.4	12.6
62.5°	5.0	5.0	6.9	9.5	10.1
65°	3.8	4.4	5.0	6.9	8.2
67.5°	3.2	3.2	3.8	5.7	6.3
70°	2.5	2.5	3.2	4.4	5.0
72.5°	1.9	1.9	2.5	3.8	3.8
75°	1.3	1.9	1.9	2.5	3.2
77.5°	1.3	1.3	1.3	1.9	2.5
80°	0.6	0.6	1.3	1.3	1.9
82.5°	0.6	0.6	0.6	0.6	1.3
85°	0.0	0.0	0.0	0.6	0.6
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)