

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: P1057815

Luminaire Tested: S122RDR-S1005D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057815  
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-S1005D840-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, 80 CRI LEDS  
Ballast/Driver: -

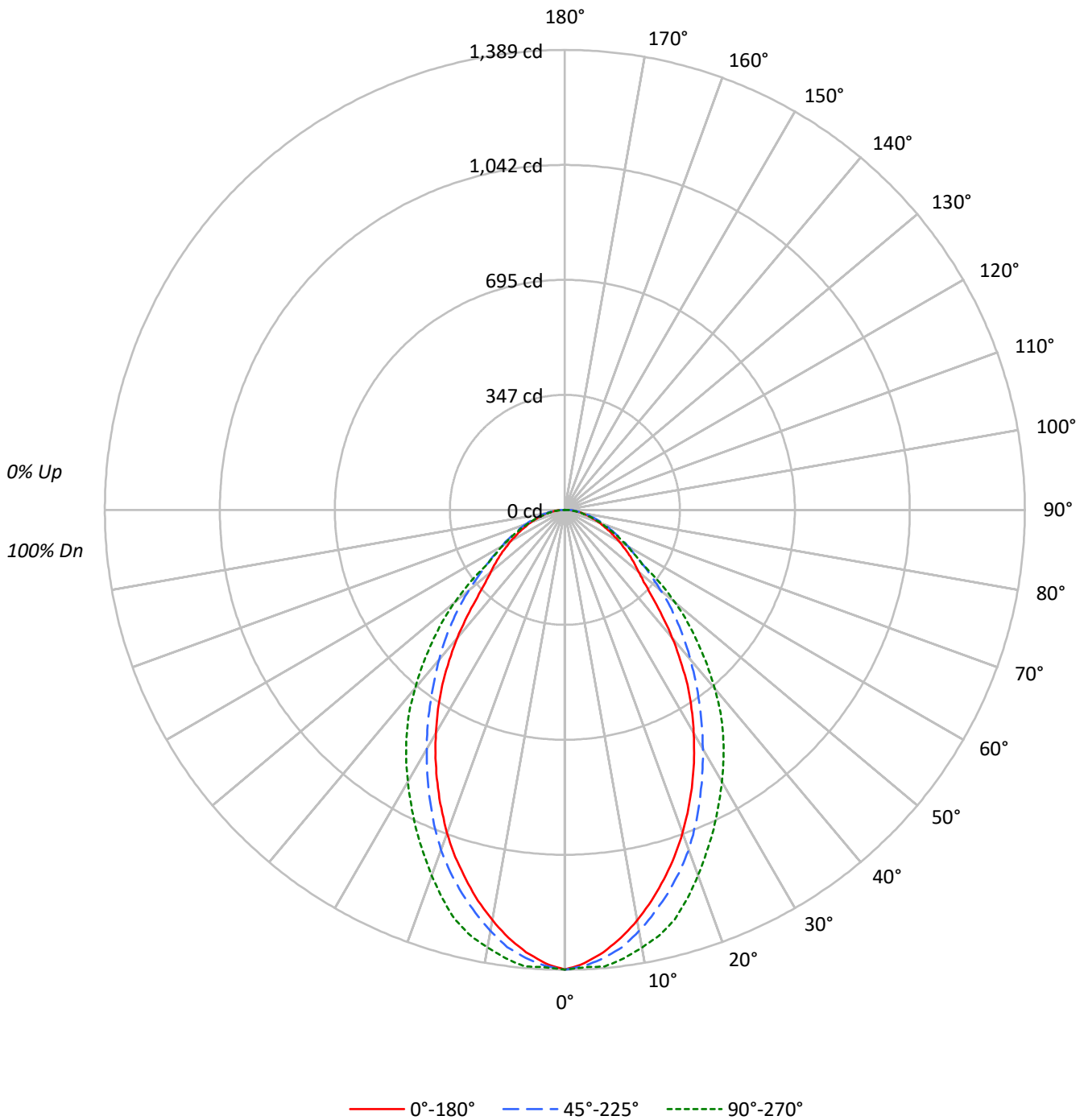
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2263.9 lumens  
Efficiency: N/A  
Efficacy: 54.2 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): 41.8  
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: P1057815

CATALOG NUMBER: S122RDR-S1005D840-X4F0-XX-UDD-WVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1057815

CATALOG NUMBER: S122RDR-S1005D840-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°	25623	25623	25623
5°	24837	25169	25639
10°	23584	24201	25151
15°	22078	22905	24473
20°	20406	21463	23075
25°	18544	19639	21645
30°	16575	17753	20203
35°	14529	15910	18769
40°	12157	14207	16941
45°	9742	12586	14807
50°	8359	10845	12430
55°	7637	9223	9175
60°	6942	8156	7990
65°	6322	7300	6977
70°	5800	6685	6204
75°	5433	6174	5433
80°	5079	5717	4761
85°	5060	6013	4107

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 14807 cd/sqm

TEST NUMBER: P1057815

CATALOG NUMBER: S122RDR-S1005D840-X4F0-XX-UDD-WVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.2	5.7
10°-20°	339.4	15.0
20°-30°	447.6	19.8
30°-40°	450.8	19.9
40°-50°	366.9	16.2
50°-60°	250.1	11.0
60°-70°	162.4	7.2
70°-80°	89.4	3.9
80°-90°	29.2	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°	915.2	40.4
0°-40°	1365.9	60.3
0°-60°	1982.9	87.6
0°-90°	2263.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2263.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1389	1389	1389	1389	1389	
5°	1341	1366	1359	1371	1384	125
15°	1156	1186	1199	1248	1281	324
25°	911	941	965	1008	1063	418
35°	645	678	706	768	833	401
45°	373	420	482	524	567	294
55°	237	261	287	288	285	213
65°	145	172	167	158	160	144
75°	76	94	87	78	76	81
85°	24	31	28	22	19	26
90°	0	0	0	0	0	



TEST NUMBER: P1057815

CATALOG NUMBER: S122RDR-S1005D840-X4F0-XX-UDD-WVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1388.6	1388.6	1388.6	1388.6	1388.6
2.5°	1370.7	1393.1	1378.2	1379.7	1382.7
5°	1340.9	1366.2	1358.8	1370.7	1384.2
7.5°	1303.5	1328.9	1331.9	1349.8	1366.2
10°	1258.7	1287.1	1291.6	1318.5	1342.3
12.5°	1209.5	1240.8	1246.8	1285.6	1317.0
15°	1155.7	1185.6	1199.0	1248.3	1281.1
17.5°	1099.0	1127.3	1148.2	1193.0	1230.4
20°	1039.2	1066.1	1093.0	1133.3	1175.1
22.5°	975.0	1004.9	1030.3	1070.6	1118.4
25°	910.8	940.7	964.6	1007.9	1063.1
27.5°	845.1	875.0	898.9	945.2	1004.9
30°	777.9	809.3	833.2	885.4	948.2
32.5°	712.2	743.6	770.5	825.7	891.4
35°	645.0	677.9	706.3	767.5	833.2
37.5°	573.4	610.7	646.5	707.8	772.0
40°	504.7	546.5	589.8	646.5	703.3
42.5°	436.0	482.3	536.0	583.8	636.1
45°	373.3	419.6	482.3	524.1	567.4
47.5°	324.0	362.8	430.0	464.4	503.2
50°	291.2	318.0	377.8	404.6	433.0
52.5°	264.3	286.7	328.5	346.4	361.3
55°	237.4	261.3	286.7	288.2	285.2
57.5°	210.5	237.4	250.8	240.4	246.4
60°	188.1	215.0	221.0	210.5	216.5
62.5°	164.2	194.1	194.1	183.7	186.6
65°	144.8	171.7	167.2	158.3	159.8
67.5°	125.4	152.3	144.8	135.9	135.9
70°	107.5	132.9	123.9	115.0	115.0
72.5°	91.1	112.0	106.0	95.6	94.1
75°	76.2	94.1	86.6	77.6	76.2
77.5°	61.2	76.2	70.2	62.7	59.7
80°	47.8	61.2	53.8	47.8	44.8
82.5°	35.8	46.3	40.3	34.3	31.4
85°	23.9	31.4	28.4	22.4	19.4
87.5°	11.9	20.9	17.9	14.9	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)