

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: P988966

Luminaire Tested: S122RDR-B485DB2750-4F0-XX-W2A-F\_2700K

Issue Date: 5/2/2025

**Test Information**

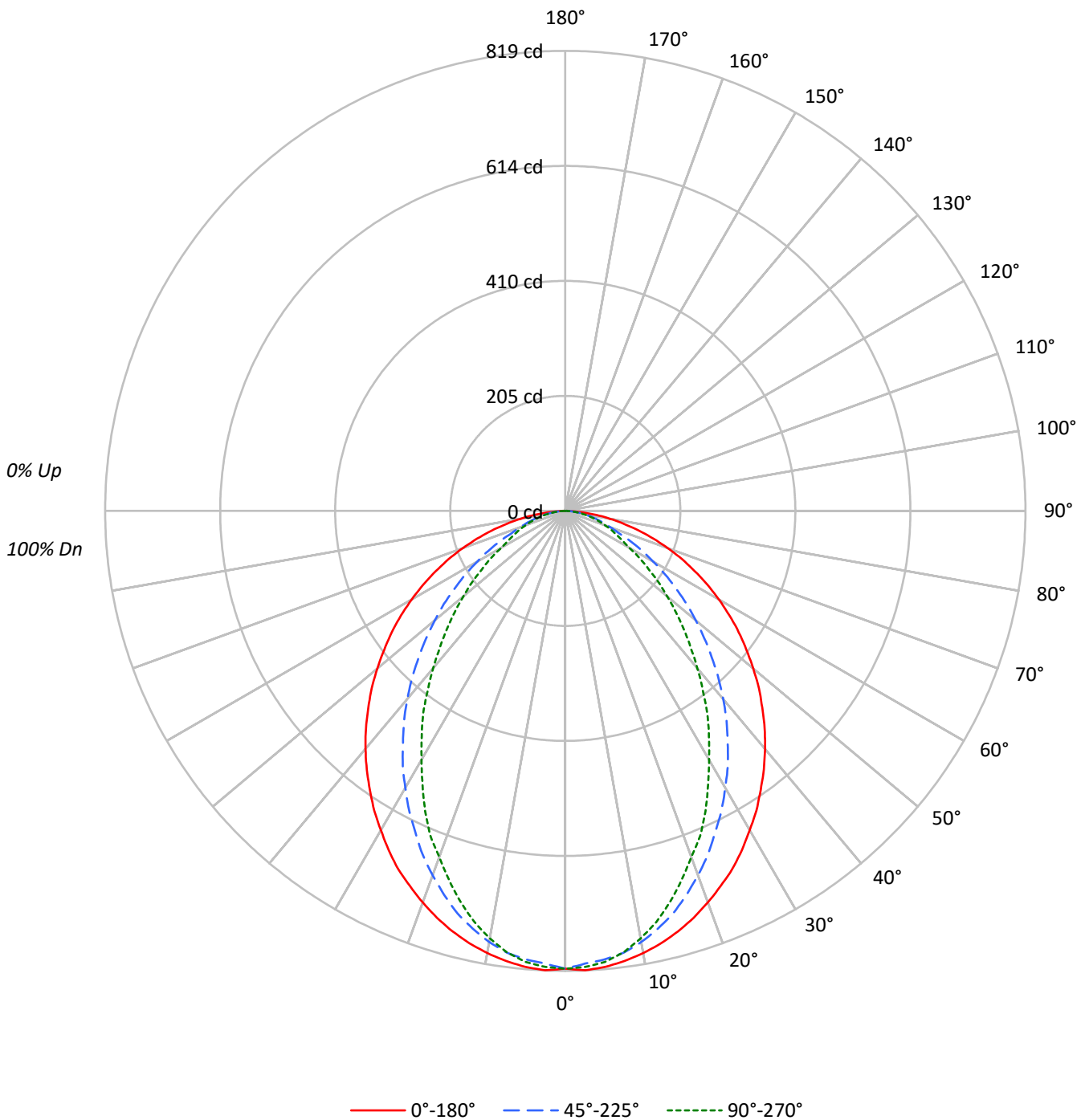
Test Method: LM-79-2019  
Report Number: P988966  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-B485DB2750-4F0-XX-W2A-F\_2700K  
Description: Define 2 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1676.0 lumens  
Efficiency: N/A  
Efficacy: 69.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 24  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	76	76	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	66	66	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	57	57	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	51	51	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	45	45	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	41	41	41	39
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	37	37	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	34	34	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	31	31	31	29

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

	0°	45°	90°
0°	12899	12899	12899
5°	12949	12739	12809
10°	12849	12529	12423
15°	12702	12158	11807
20°	12497	11628	11044
25°	12289	11026	10305
30°	11998	10406	9355
35°	11714	9733	8522
40°	11429	9036	7559
45°	11094	8254	6687
50°	10752	7464	5829
55°	10402	6615	5006
60°	9991	5721	4157
65°	9529	4806	3783
70°	8979	3957	3480
75°	8299	3608	3248
80°	7329	3227	2953
85°	5757	2543	2543

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11094 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.4	4.6
10°-20°	209.7	12.5
20°-30°	294.4	17.6
30°-40°	320.9	19.1
40°-50°	294.9	17.6
50°-60°	231.6	13.8
60°-70°	150.7	9.0
70°-80°	77.6	4.6
80°-90°	19.8	1.2
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°	580.4	34.6
0°-40°	901.3	53.8
0°-60°	1427.8	85.2
0°-90°	1676.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1676.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	815	815	815	815	815	
5°	815	811	802	808	806	77
15°	775	767	742	728	720	218
25°	704	680	631	601	590	324
35°	606	569	504	457	441	379
45°	496	446	369	316	299	383
55°	377	319	240	195	181	337
65°	254	195	128	103	101	252
75°	136	84	59	54	53	144
85°	32	16	14	14	14	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	814.9	814.9	814.9	814.9	814.9
2.5°	818.6	814.9	806.8	814.2	812.7
5°	814.9	811.2	801.7	808.3	806.1
7.5°	808.3	803.9	793.5	796.5	792.8
10°	799.4	794.3	779.5	777.3	772.9
12.5°	788.4	781.7	761.8	757.4	749.3
15°	775.1	767.0	741.9	727.9	720.5
17.5°	759.6	747.8	716.8	700.6	688.8
20°	741.9	727.2	690.3	671.9	655.6
22.5°	722.7	705.8	663.0	637.9	626.9
25°	703.6	680.0	631.3	601.1	590.0
27.5°	680.7	655.6	601.8	567.1	550.2
30°	656.4	628.3	569.3	531.7	511.8
32.5°	632.8	598.8	538.4	494.1	475.7
35°	606.2	568.6	503.7	457.2	441.0
37.5°	580.4	539.8	471.3	420.4	401.9
40°	553.1	508.9	437.3	385.0	365.8
42.5°	525.1	477.9	403.4	348.8	330.4
45°	495.6	446.2	368.7	316.4	298.7
47.5°	467.6	415.2	335.6	283.2	267.0
50°	436.6	384.2	303.1	252.2	236.7
52.5°	406.4	351.0	272.1	223.5	209.4
55°	376.9	319.3	239.7	195.4	181.4
57.5°	346.6	287.6	210.9	169.6	157.8
60°	315.6	256.6	180.7	143.1	131.3
62.5°	285.4	226.4	154.9	119.5	113.6
65°	254.4	194.7	128.3	103.2	101.0
67.5°	224.9	165.2	103.2	90.7	88.5
70°	194.0	136.4	85.5	78.2	75.2
72.5°	164.5	109.9	71.5	65.6	64.2
75°	135.7	84.1	59.0	53.8	53.1
77.5°	106.9	59.7	46.5	43.5	42.0
80°	80.4	42.8	35.4	32.4	32.4
82.5°	56.0	28.8	24.3	22.9	22.9
85°	31.7	16.2	14.0	14.0	14.0
87.5°	11.8	5.9	5.9	5.2	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)