Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P1058378

Luminaire Tested: S122RDR-H485D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

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Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1058378
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab:	INNOVATION CENTER
Issue Date:	8/7/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	NEO-RAY
Catalog Number:	S122RDR-H485D840-X4F0-XX-UDD-SVL-S
Description:	DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
	HIGH PERFORMANCE LIGHT ENGINE
Light Source:	4000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	447.8 lumens
Efficiency:	N/A
Efficacy:	25.7 lumens/watt
Spacing Criteria (0/90/45):	0.82 / 0.97 / 0.94
Luminous Opening:	Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type:	Direct

Input Watts (W):	17.4
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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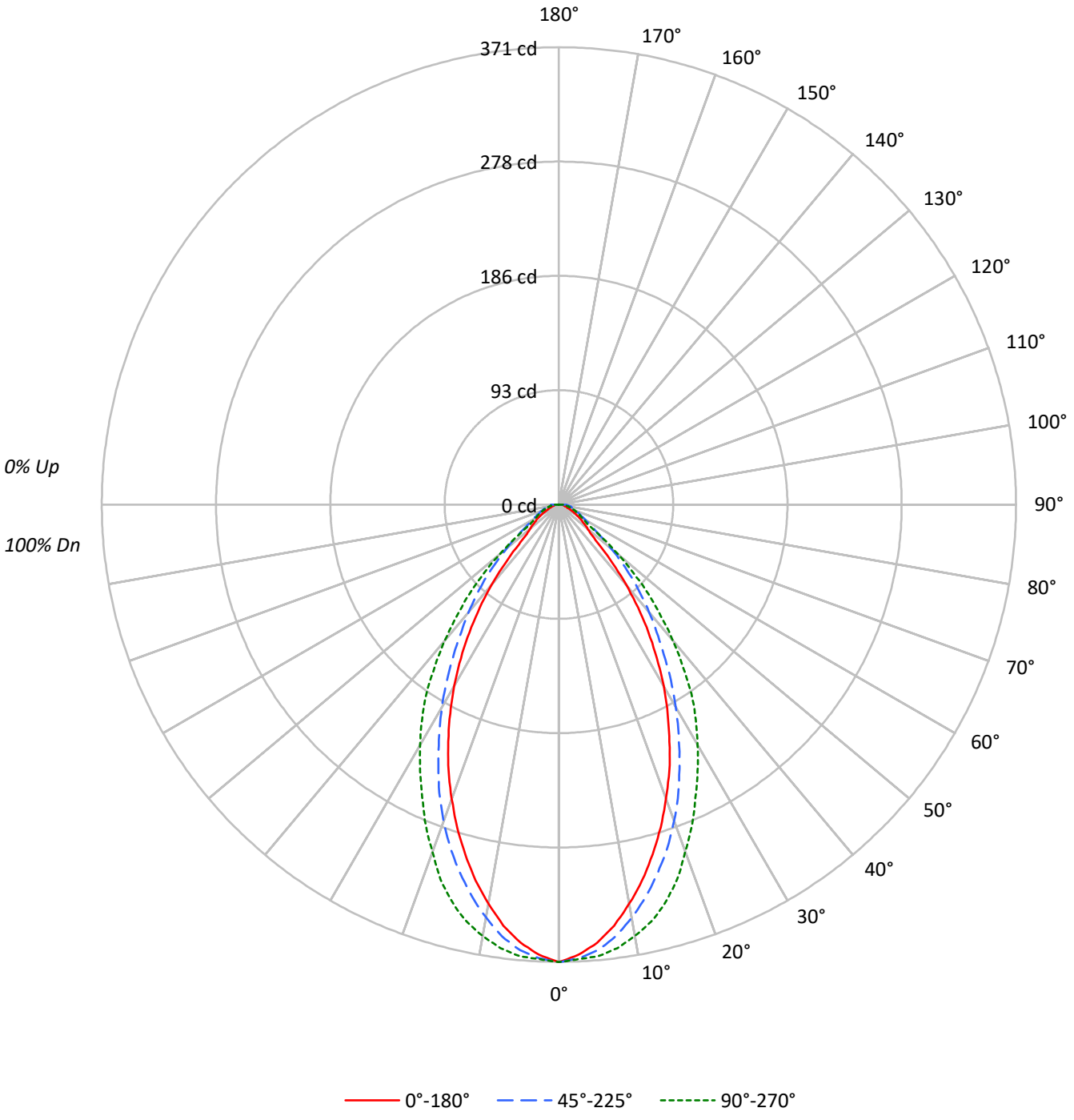
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6850	6850	6850
5°	6609	6724	6813
10°	6161	6378	6661
15°	5613	5914	6384
20°	4990	5367	5891
25°	4322	4713	5340
30°	3620	4042	4800
35°	2854	3347	4228
40°	2045	2739	3464
45°	1198	2163	2680
50°	864	1573	1809
55°	727	1123	949
60°	583	912	808
65°	480	808	747
70°	405	777	701
75°	392	827	684
80°	436	1020	723
85°	720	1588	1016

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
Vertical Angle: 45°
Luminance: 2680 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.0	7.6
10°-20°	87.1	19.5
20°-30°	107.1	23.9
30°-40°	94.7	21.1
40°-50°	60.4	13.5
50°-60°	29.5	6.6
60°-70°	17.6	3.9
70°-80°	11.2	2.5
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°	228.3	51.0
0°-40°	323.0	72.1
0°-60°	412.9	92.2
0°-90°	447.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	447.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	371	371	371	371	371	
5°	357	364	363	364	368	33
15°	294	302	310	323	334	82
25°	212	220	232	246	262	97
35°	127	134	149	169	188	79
45°	46	59	83	93	103	39
55°	23	30	35	33	30	20
65°	11	20	18	17	17	11
75°	6	12	12	10	10	6
85°	3	7	8	7	5	3
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	371.2	*371.2*	371.2	371.2	371.2
2.5°	*365.7*	*372.6*	*368.5*	*368.5*	*369.2*
5°	356.8	*364.4*	363.0	364.4	367.8
7.5°	344.5	*352.0*	353.4	358.9	363.0
10°	328.8	*336.3*	340.4	349.3	355.5
12.5°	312.3	*319.8*	326.0	337.7	346.6
15°	293.8	*302.0*	309.6	323.3	334.2
17.5°	274.6	*282.9*	292.5	306.2	319.2
20°	254.1	*261.6*	273.3	286.3	300.0
22.5°	234.2	*241.1*	253.4	265.7	282.2
25°	212.3	*219.9*	231.5	245.9	262.3
27.5°	191.1	*198.6*	210.3	226.7	243.8
30°	169.9	*176.7*	189.7	206.8	225.3
32.5°	147.9	*154.8*	169.2	187.7	206.8
35°	126.7	*133.6*	148.6	169.2	187.7
37.5°	105.5	*113.0*	130.1	149.3	165.1
40°	84.9	*93.8*	113.7	130.1	143.8
42.5°	64.4	*76.7*	97.9	111.6	122.6
45°	45.9	*58.9*	82.9	93.1	102.7
47.5°	34.9	*45.2*	68.5	76.0	82.2
50°	30.1	*37.0*	54.8	60.3	63.0
52.5°	26.0	*32.9*	43.8	45.9	44.5
55°	22.6	*30.1*	34.9	32.9	29.5
57.5°	19.2	*28.1*	28.8	24.7	25.3
60°	15.8	*25.3*	24.7	21.2	21.9
62.5°	13.0	*23.3*	21.2	19.2	19.2
65°	11.0	*20.5*	18.5	17.1	17.1
67.5°	8.9	*18.5*	16.4	15.1	15.1
70°	7.5	*16.4*	14.4	13.0	13.0
72.5°	6.8	*14.4*	13.0	11.6	11.6
75°	5.5	*12.3*	11.6	10.3	9.6
77.5°	4.8	*10.3*	10.3	9.6	8.2
80°	4.1	*8.9*	9.6	8.2	6.8
82.5°	4.1	*8.2*	8.2	7.5	5.5
85°	3.4	*6.8*	7.5	6.8	4.8
87.5°	2.1	*6.2*	6.2	5.5	3.4
90°	0.0	*0.0*	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
	Ceiling	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
	Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
	Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	8.72	10.00	9.08	10.31	10.62	8.25	9.53	8.61	9.84	10.15
	3H	9.89	11.03	10.27	11.36	11.72	9.81	10.95	10.19	11.28	11.64
	4H	10.32	11.38	10.72	11.73	12.12	10.49	11.55	10.89	11.90	12.29
	6H	10.66	11.64	11.08	12.01	12.41	11.13	12.11	11.55	12.48	12.87
	8H	10.86	11.79	11.29	12.18	12.58	11.42	12.35	11.85	12.74	13.14
	12H	11.08	11.96	11.51	12.34	12.77	11.74	12.62	12.17	13.01	13.44
4H	2H	9.22	10.28	9.62	10.63	11.02	8.84	9.91	9.25	10.26	10.64
	3H	10.86	11.74	11.27	12.14	12.54	10.64	11.52	11.06	11.92	12.33
	4H	11.62	12.41	12.06	12.83	13.27	11.48	12.27	11.92	12.69	13.13
	6H	12.23	12.91	12.69	13.35	13.82	12.34	13.02	12.80	13.46	13.93
	8H	12.52	13.16	12.99	13.61	14.08	12.72	13.36	13.19	13.81	14.28
	12H	12.83	13.40	13.32	13.88	14.35	13.16	13.72	13.65	14.21	14.68
8H	4H	12.04	12.68	12.51	13.12	13.60	11.94	12.58	12.41	13.02	13.50
	6H	12.99	13.51	13.49	14.01	14.49	13.05	13.57	13.55	14.06	14.55
	8H	13.54	14.00	14.06	14.52	15.01	13.62	14.09	14.14	14.61	15.10
	12H	14.10	14.51	14.61	15.00	15.58	14.29	14.70	14.80	15.20	15.77
12H	4H	12.11	12.67	12.60	13.16	13.63	12.02	12.59	12.51	13.07	13.54
	6H	13.17	13.64	13.70	14.16	14.65	13.23	13.70	13.75	14.21	14.71
	8H	13.86	14.28	14.38	14.77	15.35	13.94	14.35	14.45	14.85	15.42

END OF REPORT