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: P1056509

Luminaire Tested: S125R3DR-H1090D930-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method:	LM-79-2019
Report Number:	P1056509
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)
Test Lab:	INNOVATION CENTER
Issue Date:	7/25/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	NEO-RAY
Catalog Number:	S125R3DR-H1090D930-X4F0-XX-UDD-FLL-S
Description:	DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS HIGH PERFORMANCE LIGHT ENGINE
Light Source:	3000K CCT, 90 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	1987.5 lumens
Efficiency:	N/A
Efficacy:	64.3 lumens/watt
Spacing Criteria (0/90/45):	1.19 / 0.95 / 1.11
Luminous Opening:	Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type:	Direct
Input Watts (W):	30.9
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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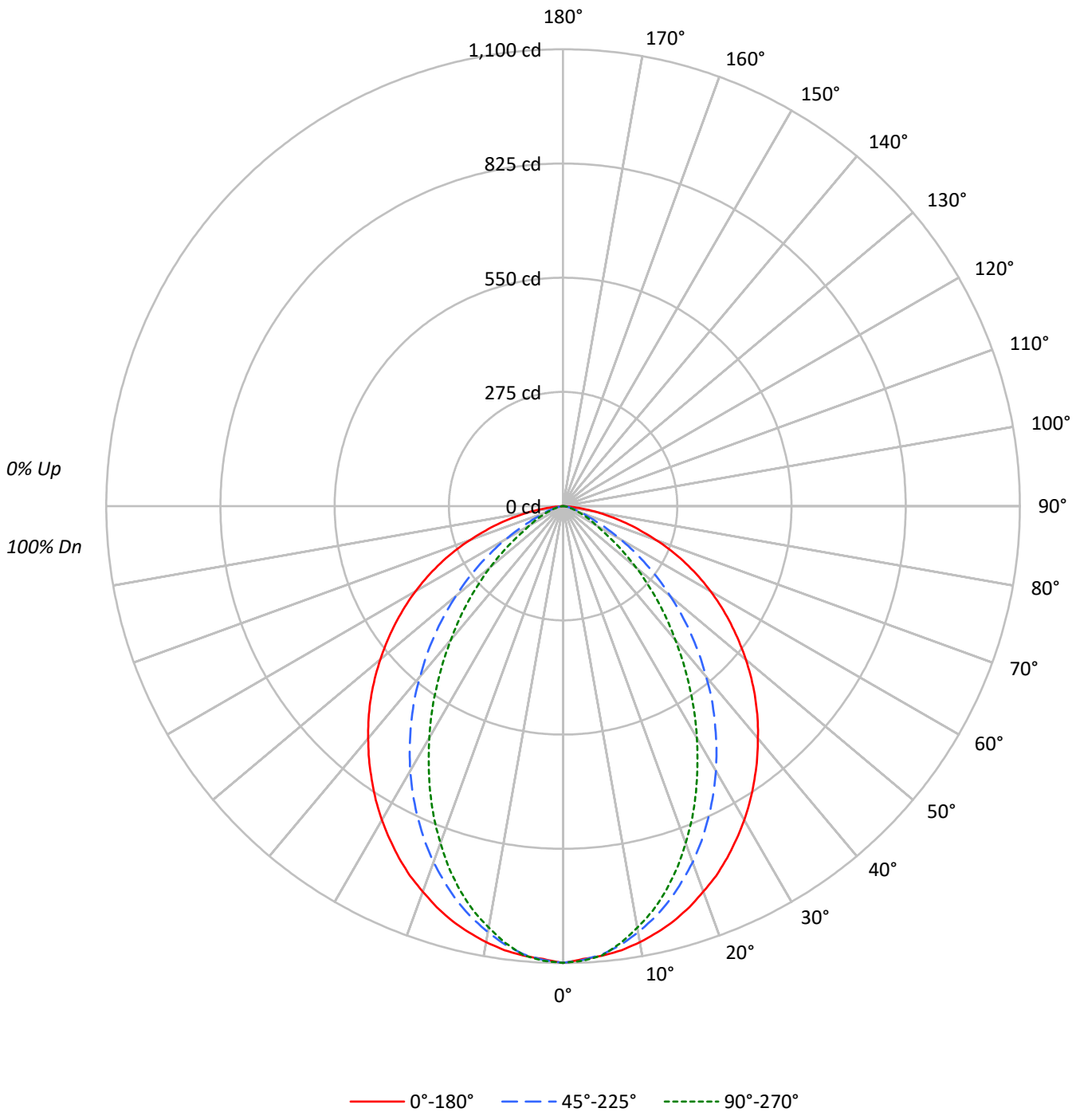
Luminous Intensity Polar Plot



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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	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7773	7773	7773
5°	7709	7687	7702
10°	7652	7477	7397
15°	7564	7206	7012
20°	7430	6863	6495
25°	7291	6457	5909
30°	7123	6009	5261
35°	6933	5501	4578
40°	6737	4943	3871
45°	6545	4357	3206
50°	6316	3706	2520
55°	6074	3012	1833
60°	5801	2245	1311
65°	5450	1482	1022
70°	4926	1031	715
75°	4283	666	557
80°	3359	497	456
85°	1736	414	333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 6545 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	5.2
10°-20°	278.5	14.0
20°-30°	385.0	19.4
30°-40°	407.9	20.5
40°-50°	356.1	17.9
50°-60°	253.2	12.7
60°-70°	140.8	7.1
70°-80°	54.1	2.7
80°-90°	9.4	0.5
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°	765.9	38.5
0°-40°	1173.9	59.1
0°-60°	1783.2	89.7
0°-90°	1987.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1987.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1100	1100	1100	1100	1100	
5°	1086	1094	1083	1080	1085	103
15°	1034	1024	985	963	958	291
25°	935	903	828	777	758	430
35°	803	748	637	560	530	503
45°	655	576	436	348	321	505
55°	493	395	244	169	149	441
65°	326	214	89	65	61	322
75°	157	61	24	20	20	166
85°	21	6	5	4	4	32
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1099.6	*1099.6*	1099.6	1099.6	1099.6
2.5°	*1091.5*	*1102.7*	*1093.5*	*1094.5*	*1095.6*
5°	1086.4	*1094.5*	1083.3	1080.3	1085.4
7.5°	1078.3	*1084.4*	1065.0	1057.9	1060.9
10°	1066.0	*1068.1*	1041.6	1031.4	1030.4
12.5°	1050.8	*1047.7*	1015.1	998.8	997.8
15°	1033.5	*1024.3*	984.6	963.2	958.1
17.5°	1012.1	*997.8*	948.9	921.5	913.3
20°	987.6	*968.3*	912.3	876.7	863.4
22.5°	963.2	*936.7*	871.6	826.8	812.5
25°	934.7	*903.1*	827.8	776.9	757.5
27.5°	904.1	*866.5*	783.0	723.9	700.5
30°	872.6	*828.8*	736.1	670.0	644.5
32.5°	839.0	*789.1*	687.3	615.0	588.5
35°	803.3	*748.4*	637.4	560.0	530.5
37.5°	767.7	*706.6*	588.5	506.0	475.5
40°	730.0	*663.9*	535.6	451.1	419.5
42.5°	693.4	*620.1*	485.7	399.1	370.6
45°	654.7	*576.3*	435.8	348.2	320.7
47.5°	615.0	*530.5*	385.9	300.4	272.9
50°	574.3	*485.7*	337.0	253.5	229.1
52.5°	533.5	*440.9*	291.2	208.7	187.3
55°	492.8	*395.1*	244.4	169.0	148.7
57.5°	452.1	*350.3*	200.6	132.4	114.0
60°	410.3	*304.4*	158.8	97.7	92.7
62.5°	368.6	*259.6*	123.2	80.4	76.4
65°	325.8	*213.8*	88.6	65.2	61.1
67.5°	283.1	*172.1*	64.1	49.9	46.8
70°	238.3	*131.3*	49.9	37.7	34.6
72.5°	195.5	*94.7*	35.6	27.5	26.5
75°	156.8	*61.1*	24.4	20.4	20.4
77.5°	118.1	*36.7*	17.3	15.3	15.3
80°	82.5	*21.4*	12.2	11.2	11.2
82.5°	49.9	*11.2*	8.1	7.1	7.1
85°	21.4	*6.1*	5.1	4.1	4.1
87.5°	4.1	*2.0*	2.0	2.0	2.0
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	18.29	19.73	18.65	20.05	20.36	10.93	12.37	11.29	12.68	13.00
	3H	19.85	21.13	20.22	21.46	21.82	11.49	12.78	11.87	13.10	13.47
	4H	20.37	21.57	20.77	21.92	22.30	11.61	12.82	12.01	13.17	13.55
	6H	20.71	21.81	21.12	22.18	22.57	11.68	12.79	12.09	13.15	13.55
	8H	20.79	21.84	21.22	22.23	22.63	11.68	12.73	12.11	13.12	13.53
	12H	20.81	21.82	21.24	22.20	22.63	11.67	12.68	12.11	13.06	13.49
4H	2H	18.18	19.39	18.58	19.74	20.12	11.49	12.69	11.89	13.04	13.42
	3H	19.85	20.84	20.26	21.24	21.64	12.16	13.15	12.57	13.55	13.95
	4H	20.40	21.28	20.83	21.70	22.14	12.32	13.20	12.75	13.62	14.06
	6H	20.79	21.56	21.25	22.00	22.46	12.43	13.20	12.89	13.64	14.10
	8H	20.90	21.61	21.36	22.06	22.52	12.44	13.16	12.91	13.60	14.07
	12H	20.94	21.58	21.43	22.06	22.53	12.45	13.08	12.93	13.56	14.03
8H	4H	20.30	21.02	20.77	21.46	21.93	12.59	13.30	13.06	13.75	14.22
	6H	20.69	21.27	21.19	21.77	22.25	12.72	13.31	13.22	13.80	14.28
	8H	20.80	21.32	21.31	21.83	22.32	12.75	13.28	13.27	13.79	14.28
	12H	20.86	21.32	21.37	21.82	22.39	12.77	13.24	13.29	13.73	14.30
12H	4H	20.27	20.90	20.75	21.38	21.85	12.61	13.24	13.09	13.72	14.19
	6H	20.64	21.16	21.15	21.67	22.16	12.74	13.26	13.25	13.77	14.26
	8H	20.76	21.23	21.28	21.72	22.29	12.79	13.26	13.31	13.75	14.32

END OF REPORT