

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: P1056540

Luminaire Tested: S125R3DR-H1270D935-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056540
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-H1270D935-X4F0-XX-UDD-FLL-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

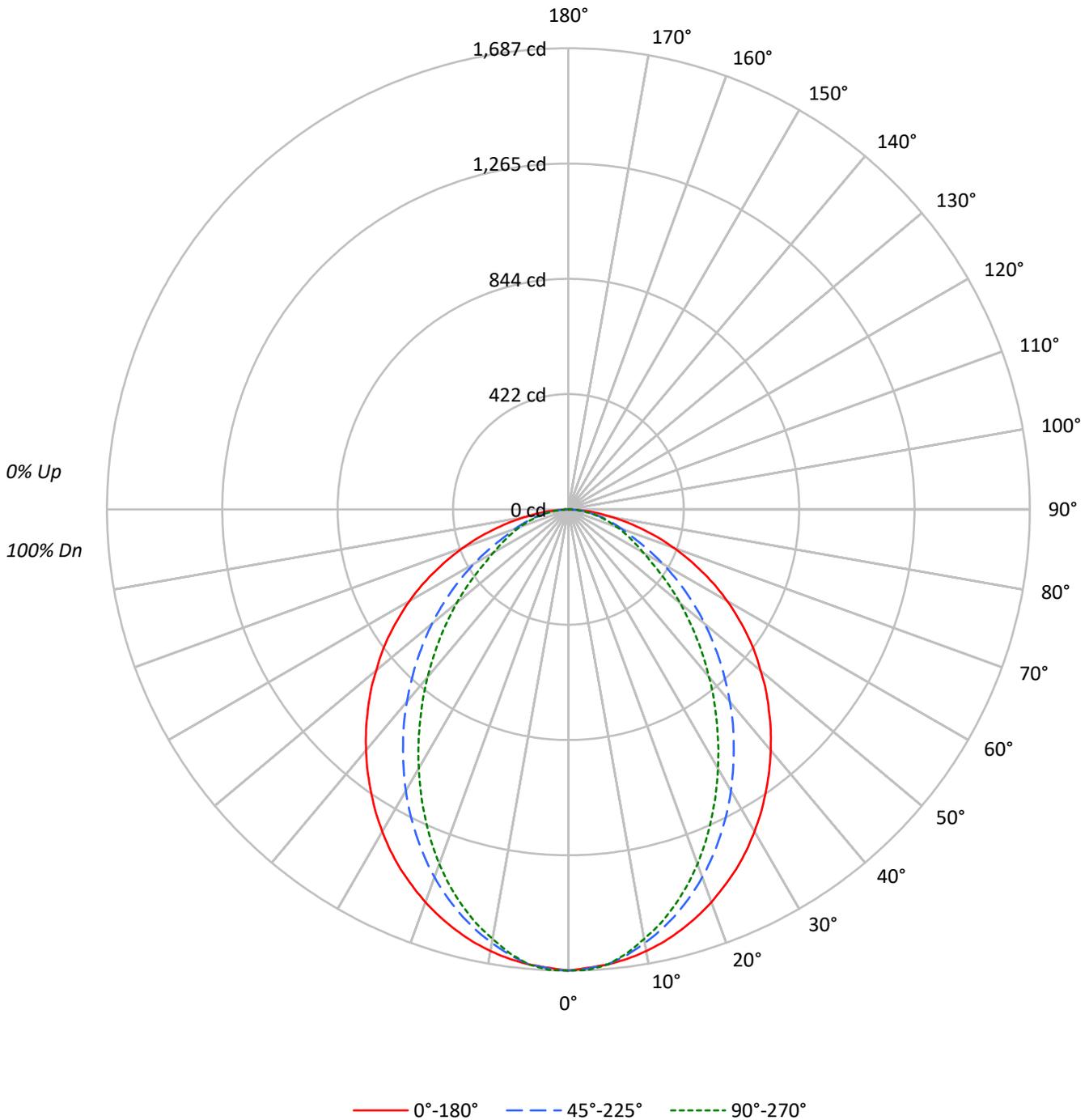
Lumens per Lamp: N/A
Luminaire Lumens: 3575.4 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 36.6
Input Voltage (V): 120
Input Current (A_{in}): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11925	11925	11925
5°	11855	11847	11855
10°	11776	11559	11451
15°	11657	11206	10977
20°	11500	10772	10385
25°	11326	10258	9680
30°	11105	9700	8931
35°	10862	9095	8152
40°	10618	8473	7384
45°	10360	7823	6618
50°	10084	7156	5858
55°	9830	6425	5094
60°	9484	5647	4475
65°	9014	4791	4160
70°	8464	4285	3894
75°	7651	3947	3671
80°	6648	3578	3428
85°	5199	3155	3155

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10360 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.8	4.4
10°-20°	433.4	12.1
20°-30°	612.2	17.1
30°-40°	673.9	18.8
40°-50°	628.6	17.6
50°-60°	501.9	14.0
60°-70°	337.7	9.4
70°-80°	179.9	5.0
80°-90°	50.0	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°	1203.4	33.7
0°-40°	1877.4	52.5
0°-60°	3007.9	84.1
0°-90°	3575.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3575.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1687	1687	1687	1687	1687	
5°	1671	1684	1669	1664	1671	159
15°	1593	1584	1531	1505	1500	449
25°	1452	1408	1315	1257	1241	668
35°	1259	1184	1054	971	945	788
45°	1036	938	782	687	662	800
55°	798	677	521	438	413	712
65°	539	421	286	254	249	534
75°	280	186	144	136	134	298
85°	64	44	39	40	39	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1686.9	1686.9	1686.9	1686.9	1686.9
2.5°	1678.1	1692.0	1680.7	1683.2	1685.7
5°	1670.6	1684.4	1669.4	1664.3	1670.6
7.5°	1658.0	1669.4	1644.2	1632.9	1637.9
10°	1640.5	1648.0	1610.3	1595.2	1595.2
12.5°	1619.1	1619.1	1573.9	1552.5	1552.5
15°	1592.7	1583.9	1531.2	1504.8	1499.8
17.5°	1562.6	1546.3	1483.4	1449.5	1443.3
20°	1528.7	1502.3	1431.9	1388.0	1380.4
22.5°	1491.0	1457.1	1375.4	1321.4	1312.6
25°	1452.0	1408.1	1315.1	1257.4	1241.0
27.5°	1408.1	1355.3	1253.6	1188.3	1168.2
30°	1360.4	1300.1	1188.3	1115.4	1094.1
32.5°	1311.4	1243.5	1121.7	1043.8	1019.9
35°	1258.6	1184.5	1053.9	971.0	944.6
37.5°	1205.9	1125.5	987.3	900.6	873.0
40°	1150.6	1062.7	918.2	829.0	800.1
42.5°	1095.3	1001.1	850.4	759.9	729.8
45°	1036.3	938.3	782.5	687.1	662.0
47.5°	979.8	874.2	716.0	623.0	595.4
50°	916.9	807.7	650.7	557.7	532.6
52.5°	859.2	742.4	585.3	498.7	472.3
55°	797.6	677.0	521.3	438.4	413.3
57.5°	733.6	611.7	459.7	381.9	358.0
60°	670.8	546.4	399.4	327.8	316.5
62.5°	606.7	484.9	342.9	287.6	280.1
65°	538.9	420.8	286.4	253.7	248.7
67.5°	474.8	359.2	241.2	222.3	217.3
70°	409.5	297.7	207.3	190.9	188.4
72.5°	345.4	238.7	174.6	163.3	160.8
75°	280.1	185.9	144.5	135.7	134.4
77.5°	219.8	139.4	114.3	110.5	108.0
80°	163.3	104.3	87.9	85.4	84.2
82.5°	111.8	71.6	62.8	62.8	60.3
85°	64.1	44.0	38.9	40.2	38.9
87.5°	23.9	18.8	17.6	18.8	18.8
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	19.90	21.44	20.27	21.75	22.07	16.28	17.82	16.65	18.14	18.45
	3H	21.69	23.07	22.06	23.40	23.76	17.76	19.14	18.14	19.47	19.83
	4H	22.34	23.64	22.74	23.99	24.36	18.35	19.65	18.75	20.00	20.37
	6H	22.82	24.02	23.23	24.38	24.77	18.81	20.01	19.22	20.38	20.77
	8H	22.97	24.11	23.40	24.50	24.90	18.97	20.12	19.40	20.51	20.91
	12H	23.06	24.16	23.50	24.54	24.97	19.09	20.18	19.52	20.56	20.99
4H	2H	20.03	21.33	20.43	21.68	22.06	16.96	18.26	17.36	18.61	18.99
	3H	22.00	23.09	22.42	23.48	23.89	18.64	19.72	19.05	20.12	20.52
	4H	22.75	23.72	23.18	24.14	24.58	19.34	20.31	19.77	20.73	21.17
	6H	23.34	24.19	23.80	24.63	25.09	19.93	20.77	20.38	21.22	21.67
	8H	23.55	24.34	24.01	24.79	25.25	20.13	20.93	20.60	21.37	21.84
	12H	23.70	24.41	24.18	24.89	25.36	20.29	21.00	20.78	21.48	21.95
8H	4H	22.81	23.61	23.28	24.05	24.52	19.70	20.50	20.17	20.94	21.41
	6H	23.47	24.13	23.97	24.62	25.10	20.41	21.06	20.90	21.55	22.03
	8H	23.73	24.32	24.24	24.82	25.31	20.69	21.28	21.20	21.79	22.28
	12H	23.94	24.46	24.44	24.95	25.51	20.93	21.45	21.44	21.94	22.51
12H	4H	22.81	23.52	23.29	23.99	24.46	19.75	20.46	20.23	20.94	21.41
	6H	23.47	24.06	23.98	24.57	25.05	20.48	21.07	20.99	21.58	22.06
	8H	23.76	24.28	24.27	24.77	25.34	20.82	21.34	21.33	21.83	22.40