

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



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1056544

Luminaire Tested: S125R3DR-H1270D950-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056544  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-H1270D950-X4F0-XX-UDD-F-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

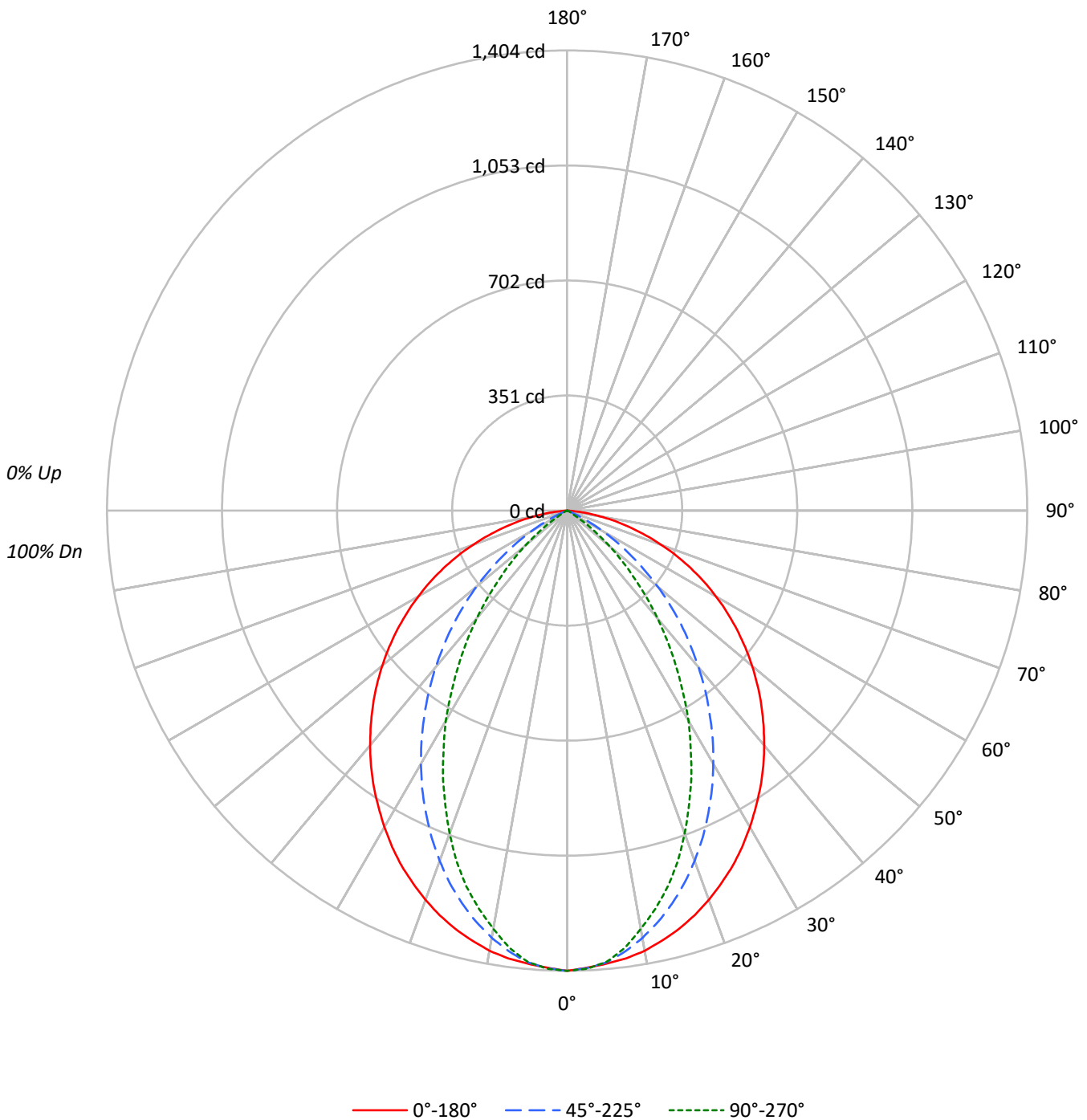
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2276.2 lumens  
Efficiency: N/A  
Efficacy: 62.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07  
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<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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

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

	0°	45°	90°
0°	9927	9927	9927
5°	9847	9817	9807
10°	9791	9501	9301
15°	9667	9076	8689
20°	9507	8554	7884
25°	9325	7947	6991
30°	9100	7282	6044
35°	8876	6546	4997
40°	8631	5754	3956
45°	8376	4912	2866
50°	8097	3965	1852
55°	7788	2899	823
60°	7419	1791	236
65°	6960	652	141
70°	6300	229	58
75°	5474	76	38
80°	4193	57	0
85°	1922	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8376 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.4	5.7
10°-20°	350.2	15.4
20°-30°	473.8	20.8
30°-40°	486.7	21.4
40°-50°	403.3	17.7
50°-60°	258.9	11.4
60°-70°	125.1	5.5
70°-80°	42.3	1.9
80°-90°	5.4	0.2
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°	954.5	41.9
0°-40°	1441.2	63.3
0°-60°	2103.4	92.4
0°-90°	2276.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2276.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1404	1404	1404	1404	1404	
5°	1388	1399	1383	1375	1382	132
15°	1321	1304	1240	1197	1187	372
25°	1196	1137	1019	927	896	550
35°	1028	930	758	626	579	643
45°	838	700	491	340	287	646
55°	632	464	235	103	67	565
65°	416	230	39	11	8	412
75°	200	43	3	1	1	213
85°	24	0	0	0	0	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1404.3	1404.3	1404.3	1404.3	1404.3
2.5°	1396.0	1407.1	1397.3	1396.0	1398.7
5°	1387.6	1398.7	1383.4	1375.1	1382.0
7.5°	1377.9	1383.4	1357.0	1343.1	1345.8
10°	1363.9	1362.5	1323.6	1299.9	1295.7
12.5°	1343.1	1336.1	1284.6	1251.2	1244.2
15°	1320.8	1304.1	1240.1	1196.9	1187.2
17.5°	1294.4	1267.9	1191.4	1135.7	1121.8
20°	1263.7	1227.5	1137.1	1068.9	1048.0
22.5°	1230.3	1184.4	1080.0	999.3	971.5
25°	1195.5	1137.1	1018.8	926.9	896.3
27.5°	1156.6	1088.4	957.5	853.2	815.6
30°	1114.8	1036.9	892.1	778.0	740.4
32.5°	1071.7	985.4	826.7	702.8	656.9
35°	1028.5	929.7	758.5	626.3	579.0
37.5°	982.6	874.0	691.7	553.9	502.4
40°	935.3	817.0	623.5	478.8	428.7
42.5°	886.6	758.5	555.3	407.8	356.3
45°	837.8	700.1	491.3	339.6	286.7
47.5°	787.7	640.2	424.5	272.8	226.9
50°	736.2	581.8	360.5	212.9	168.4
52.5°	684.8	521.9	295.1	154.5	114.1
55°	631.9	463.5	235.2	103.0	66.8
57.5°	579.0	403.6	179.5	57.1	25.1
60°	524.7	346.6	126.7	19.5	16.7
62.5°	471.8	285.3	79.3	15.3	12.5
65°	416.1	229.6	39.0	11.1	8.4
67.5°	361.9	176.8	16.7	7.0	4.2
70°	304.8	128.0	11.1	4.2	2.8
72.5°	251.9	82.1	7.0	2.8	1.4
75°	200.4	43.1	2.8	1.4	1.4
77.5°	150.3	18.1	1.4	1.4	1.4
80°	103.0	8.4	1.4	1.4	0.0
82.5°	61.2	2.8	1.4	1.4	0.0
85°	23.7	0.0	0.0	0.0	0.0
87.5°	1.4	0.0	0.0	0.0	0.0
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	19.04	20.43	19.41	20.74	21.06	3.91	5.30	4.28	5.61	5.93
	3H	20.59	21.82	20.97	22.15	22.51	3.84	5.06	4.21	5.39	5.76
	4H	21.12	22.26	21.52	22.61	22.99	3.77	4.91	4.17	5.26	5.65
	6H	21.45	22.51	21.87	22.88	23.27	3.70	4.75	4.11	5.12	5.51
	8H	21.54	22.53	21.97	22.92	23.33	3.66	4.66	4.09	5.05	5.45
	12H	21.55	22.51	21.99	22.89	23.32	3.62	4.57	4.05	4.95	5.38
4H	2H	18.85	19.99	19.25	20.34	20.72	4.78	5.92	5.18	6.27	6.65
	3H	20.46	21.39	20.87	21.80	22.20	4.73	5.66	5.14	6.06	6.47
	4H	20.98	21.82	21.42	22.23	22.68	4.65	5.48	5.08	5.90	6.34
	6H	21.36	22.08	21.82	22.52	22.99	4.58	5.30	5.05	5.75	6.21
	8H	21.46	22.13	21.92	22.57	23.04	4.53	5.20	5.00	5.65	6.12
	12H	21.49	22.09	21.98	22.57	23.04	4.49	5.08	4.98	5.57	6.04
8H	4H	20.85	21.53	21.32	21.97	22.44	5.67	6.34	6.14	6.79	7.26
	6H	21.21	21.76	21.71	22.25	22.73	5.59	6.13	6.09	6.63	7.11
	8H	21.31	21.80	21.83	22.31	22.80	5.53	6.03	6.05	6.54	7.03
	12H	21.35	21.78	21.86	22.28	22.85	5.49	5.93	6.01	6.42	6.99
12H	4H	20.81	21.41	21.30	21.89	22.36	5.75	6.34	6.23	6.82	7.30
	6H	21.15	21.64	21.67	22.16	22.65	5.65	6.14	6.17	6.66	7.15
	8H	21.26	21.70	21.78	22.19	22.76	5.62	6.05	6.13	6.55	7.12