

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: P1056407

Luminaire Tested: S125R3DR-S1270D940-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056407  
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-S1270D940-X4F0-XX-UDD-F-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

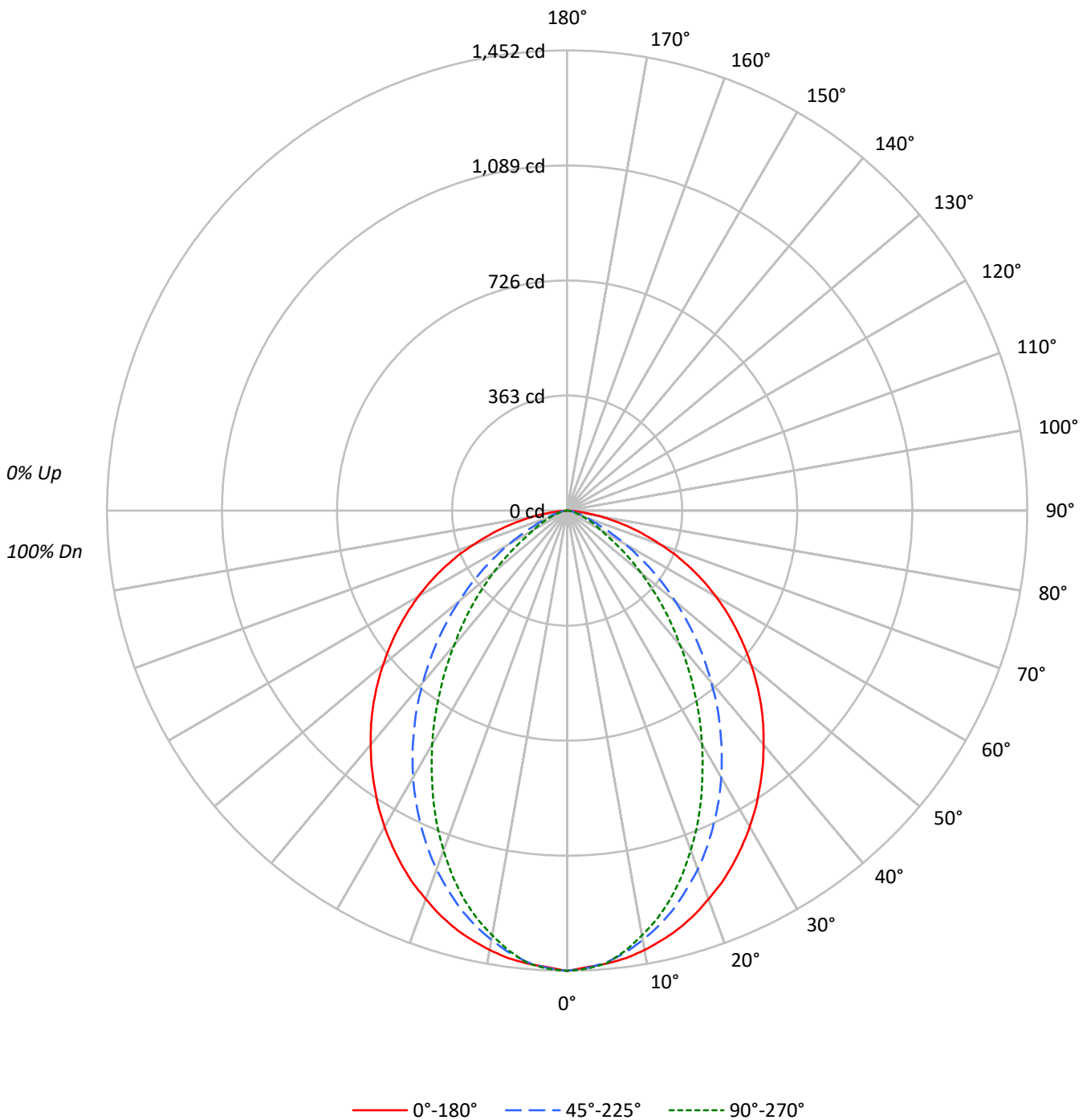
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2625.1 lumens  
Efficiency: N/A  
Efficacy: 62.7 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): 41.9  
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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77					77			
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67					67			
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59					59			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52					52			
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47					47			
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42					42			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38					38			
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35					35			
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32					32			

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

	0°	45°	90°
0°	10268	10268	10268
5°	10183	10154	10173
10°	10107	9876	9770
15°	9990	9518	9262
20°	9814	9065	8579
25°	9630	8529	7805
30°	9408	7937	6949
35°	9157	7266	6047
40°	8898	6528	5113
45°	8645	5755	4235
50°	8342	4895	3328
55°	8022	3979	2419
60°	7663	2966	1731
65°	7198	1957	1350
70°	6505	1362	945
75°	5657	882	735
80°	4433	655	603
85°	2287	543	438

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8645 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.3	5.2
10°-20°	367.8	14.0
20°-30°	508.6	19.4
30°-40°	538.8	20.5
40°-50°	470.3	17.9
50°-60°	334.5	12.7
60°-70°	186.0	7.1
70°-80°	71.5	2.7
80°-90°	12.4	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°	1011.6	38.5
0°-40°	1550.5	59.1
0°-60°	2355.2	89.7
0°-90°	2625.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2625.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1452	1452	1452	1452	1452	
5°	1435	1446	1431	1427	1434	136
15°	1365	1353	1300	1272	1266	384
25°	1235	1193	1093	1026	1001	568
35°	1061	988	842	740	701	664
45°	865	761	576	460	424	667
55°	651	522	323	223	196	582
65°	430	282	117	86	81	425
75°	207	81	32	27	27	220
85°	28	8	7	5	5	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1452.4	1452.4	1452.4	1452.4	1452.4
2.5°	1441.7	1456.5	1444.4	1445.7	1447.0
5°	1434.9	1445.7	1430.9	1426.9	1433.6
7.5°	1424.2	1432.2	1406.7	1397.3	1401.3
10°	1408.0	1410.7	1375.8	1362.3	1361.0
12.5°	1387.9	1383.8	1340.8	1319.3	1317.9
15°	1365.0	1352.9	1300.5	1272.2	1265.5
17.5°	1336.8	1317.9	1253.4	1217.1	1206.3
20°	1304.5	1278.9	1205.0	1157.9	1140.4
22.5°	1272.2	1237.2	1151.2	1092.0	1073.2
25°	1234.6	1192.9	1093.4	1026.1	1000.6
27.5°	1194.2	1144.5	1034.2	956.2	925.2
30°	1152.5	1094.7	972.3	884.9	851.3
32.5°	1108.1	1042.2	907.8	812.3	777.3
35°	1061.1	988.5	841.9	739.7	700.7
37.5°	1014.0	933.3	777.3	668.4	628.0
40°	964.2	876.8	707.4	595.8	554.1
42.5°	915.8	819.0	641.5	527.2	489.5
45°	864.7	761.2	575.6	459.9	423.6
47.5°	812.3	700.7	509.7	396.7	360.4
50°	758.5	641.5	445.1	334.9	302.6
52.5°	704.7	582.3	384.6	275.7	247.4
55°	650.9	521.8	322.8	223.2	196.3
57.5°	597.1	462.6	264.9	174.8	150.6
60°	542.0	402.1	209.8	129.1	122.4
62.5°	486.8	342.9	162.7	106.2	100.9
65°	430.3	282.4	117.0	86.1	80.7
67.5°	373.9	227.3	84.7	65.9	61.9
70°	314.7	173.5	65.9	49.8	45.7
72.5°	258.2	125.1	47.1	36.3	35.0
75°	207.1	80.7	32.3	26.9	26.9
77.5°	156.0	48.4	22.9	20.2	20.2
80°	108.9	28.2	16.1	14.8	14.8
82.5°	65.9	14.8	10.8	9.4	9.4
85°	28.2	8.1	6.7	5.4	5.4
87.5°	5.4	2.7	2.7	2.7	2.7
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	19.25	20.70	19.62	21.01	21.33	11.89	13.33	12.25	13.65	13.96
	3H	20.81	22.10	21.19	22.43	22.79	12.45	13.74	12.83	14.07	14.43
	4H	21.33	22.54	21.73	22.89	23.27	12.58	13.78	12.98	14.13	14.51
	6H	21.67	22.78	22.08	23.15	23.54	12.64	13.75	13.06	14.12	14.51
	8H	21.75	22.80	22.18	23.19	23.60	12.65	13.70	13.08	14.09	14.49
	12H	21.78	22.78	22.21	23.17	23.59	12.64	13.64	13.07	14.03	14.46
4H	2H	19.15	20.35	19.55	20.70	21.08	12.46	13.66	12.86	14.01	14.39
	3H	20.82	21.80	21.23	22.21	22.61	13.13	14.12	13.54	14.52	14.92
	4H	21.37	22.25	21.80	22.67	23.11	13.29	14.17	13.72	14.59	15.03
	6H	21.76	22.52	22.22	22.97	23.43	13.40	14.16	13.86	14.61	15.07
	8H	21.86	22.58	22.33	23.02	23.49	13.41	14.12	13.88	14.57	15.04
	12H	21.91	22.54	22.39	23.02	23.50	13.41	14.04	13.90	14.53	15.00
8H	4H	21.27	21.98	21.74	22.43	22.90	13.56	14.27	14.02	14.71	15.18
	6H	21.66	22.24	22.15	22.73	23.21	13.69	14.27	14.19	14.77	15.25
	8H	21.76	22.29	22.28	22.80	23.29	13.72	14.24	14.24	14.75	15.24
	12H	21.83	22.29	22.34	22.78	23.35	13.74	14.20	14.25	14.70	15.26
12H	4H	21.23	21.87	21.72	22.35	22.82	13.57	14.20	14.05	14.68	15.16
	6H	21.60	22.13	22.12	22.64	23.13	13.70	14.23	14.22	14.74	15.23
	8H	21.73	22.19	22.24	22.69	23.26	13.76	14.22	14.27	14.72	15.29