

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: P1056497

Luminaire Tested: S125R3DRP-H1090D835-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056497  
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: S125R3DRP-H1090D835-X4F0-XX-UDD-F-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

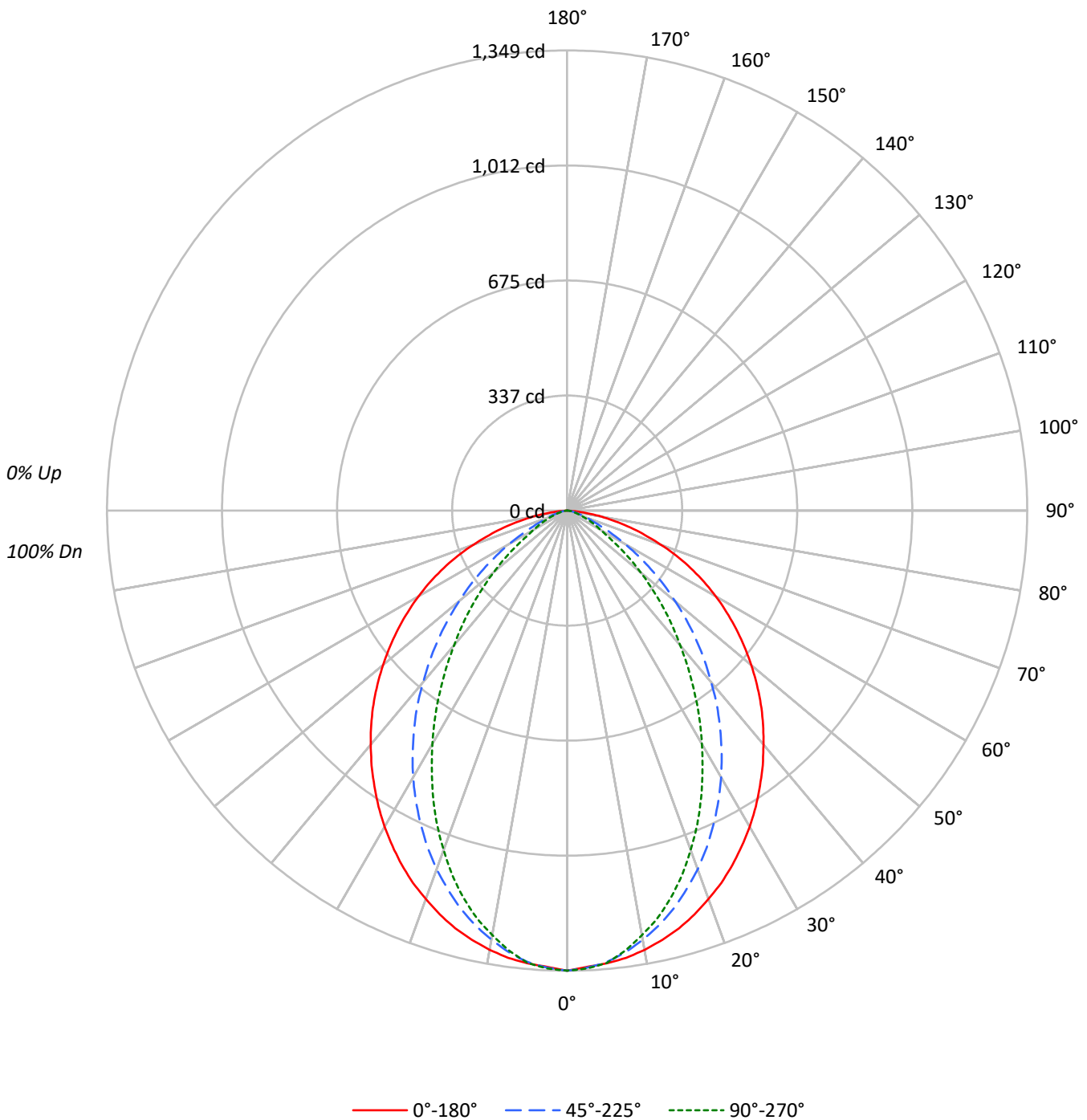
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2437.7 lumens  
Efficiency: N/A  
Efficacy: 78.9 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 (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																		
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	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°	9535	9535	9535
5°	9456	9430	9447
10°	9386	9171	9072
15°	9277	8838	8601
20°	9113	8418	7967
25°	8942	7919	7247
30°	8737	7370	6453
35°	8503	6747	5615
40°	8263	6062	4748
45°	8028	5344	3933
50°	7746	4547	3090
55°	7449	3694	2247
60°	7116	2754	1606
65°	6684	1817	1253
70°	6040	1265	878
75°	5252	819	683
80°	4120	611	558
85°	2125	503	406

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8028 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.6	5.2
10°-20°	341.5	14.0
20°-30°	472.3	19.4
30°-40°	500.4	20.5
40°-50°	436.7	17.9
50°-60°	310.6	12.7
60°-70°	172.7	7.1
70°-80°	66.4	2.7
80°-90°	11.5	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°	939.4	38.5
0°-40°	1439.8	59.1
0°-60°	2187.1	89.7
0°-90°	2437.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2437.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1349	1349	1349	1349	1349	
5°	1332	1342	1329	1325	1331	126
15°	1268	1256	1208	1181	1175	357
25°	1146	1108	1015	953	929	528
35°	985	918	782	687	651	616
45°	803	707	534	427	393	619
55°	604	485	300	207	182	540
65°	400	262	109	80	75	395
75°	192	75	30	25	25	204
85°	26	8	6	5	5	39
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1348.8	1348.8	1348.8	1348.8	1348.8
2.5°	1338.8	1352.5	1341.3	1342.5	1343.8
5°	1332.5	1342.5	1328.8	1325.0	1331.3
7.5°	1322.5	1330.0	1306.3	1297.6	1301.3
10°	1307.5	1310.0	1277.6	1265.1	1263.8
12.5°	1288.8	1285.1	1245.1	1225.1	1223.9
15°	1267.6	1256.3	1207.6	1181.4	1175.2
17.5°	1241.4	1223.9	1163.9	1130.2	1120.2
20°	1211.4	1187.7	1119.0	1075.3	1059.0
22.5°	1181.4	1148.9	1069.0	1014.1	996.6
25°	1146.4	1107.7	1015.3	952.9	929.1
27.5°	1109.0	1062.8	960.4	887.9	859.2
30°	1070.3	1016.6	902.9	821.7	790.5
32.5°	1029.0	967.9	843.0	754.3	721.8
35°	985.3	917.9	781.8	686.9	650.6
37.5°	941.6	866.7	721.8	620.7	583.2
40°	895.4	814.2	656.9	553.2	514.5
42.5°	850.5	760.5	595.7	489.5	454.6
45°	803.0	706.8	534.5	427.1	393.4
47.5°	754.3	650.6	473.3	368.4	334.7
50°	704.3	595.7	413.4	311.0	281.0
52.5°	654.4	540.7	357.2	256.0	229.8
55°	604.4	484.6	299.7	207.3	182.3
57.5°	554.5	429.6	246.0	162.3	139.9
60°	503.3	373.4	194.8	119.9	113.6
62.5°	452.1	318.5	151.1	98.7	93.7
65°	399.6	262.3	108.6	79.9	74.9
67.5°	347.2	211.1	78.7	61.2	57.4
70°	292.2	161.1	61.2	46.2	42.5
72.5°	239.8	116.1	43.7	33.7	32.5
75°	192.3	74.9	30.0	25.0	25.0
77.5°	144.9	45.0	21.2	18.7	18.7
80°	101.2	26.2	15.0	13.7	13.7
82.5°	61.2	13.7	10.0	8.7	8.7
85°	26.2	7.5	6.2	5.0	5.0
87.5°	5.0	2.5	2.5	2.5	2.5
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	19.00	20.44	19.36	20.75	21.07	11.63	13.08	12.00	13.39	13.71
	3H	20.56	21.84	20.93	22.17	22.53	12.20	13.48	12.57	13.81	14.17
	4H	21.08	22.28	21.48	22.63	23.01	12.32	13.52	12.72	13.87	14.25
	6H	21.41	22.52	21.83	22.89	23.28	12.39	13.49	12.80	13.86	14.25
	8H	21.50	22.55	21.92	22.94	23.34	12.39	13.44	12.82	13.83	14.23
	12H	21.52	22.53	21.95	22.91	23.34	12.38	13.39	12.81	13.77	14.20
4H	2H	18.89	20.09	19.29	20.44	20.82	12.20	13.40	12.60	13.75	14.13
	3H	20.56	21.55	20.97	21.95	22.35	12.87	13.86	13.28	14.26	14.66
	4H	21.11	21.99	21.54	22.41	22.85	13.03	13.91	13.46	14.33	14.77
	6H	21.50	22.27	21.96	22.71	23.17	13.14	13.90	13.60	14.35	14.81
	8H	21.61	22.32	22.07	22.76	23.23	13.15	13.86	13.62	14.31	14.78
	12H	21.65	22.29	22.14	22.77	23.24	13.15	13.78	13.64	14.27	14.74
8H	4H	21.01	21.72	21.48	22.17	22.64	13.30	14.01	13.76	14.46	14.92
	6H	21.40	21.98	21.90	22.48	22.96	13.43	14.01	13.93	14.51	14.99
	8H	21.51	22.03	22.02	22.54	23.03	13.46	13.98	13.98	14.49	14.98
	12H	21.57	22.03	22.08	22.53	23.09	13.48	13.94	13.99	14.44	15.00
12H	4H	20.98	21.61	21.46	22.09	22.56	13.31	13.95	13.80	14.43	14.90
	6H	21.35	21.87	21.86	22.38	22.87	13.44	13.97	13.96	14.48	14.97
	8H	21.47	21.94	21.99	22.43	23.00	13.50	13.96	14.01	14.46	15.03