

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: P1061497

Luminaire Tested: S125RDRP-S1090D940-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061497  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S1090D940-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

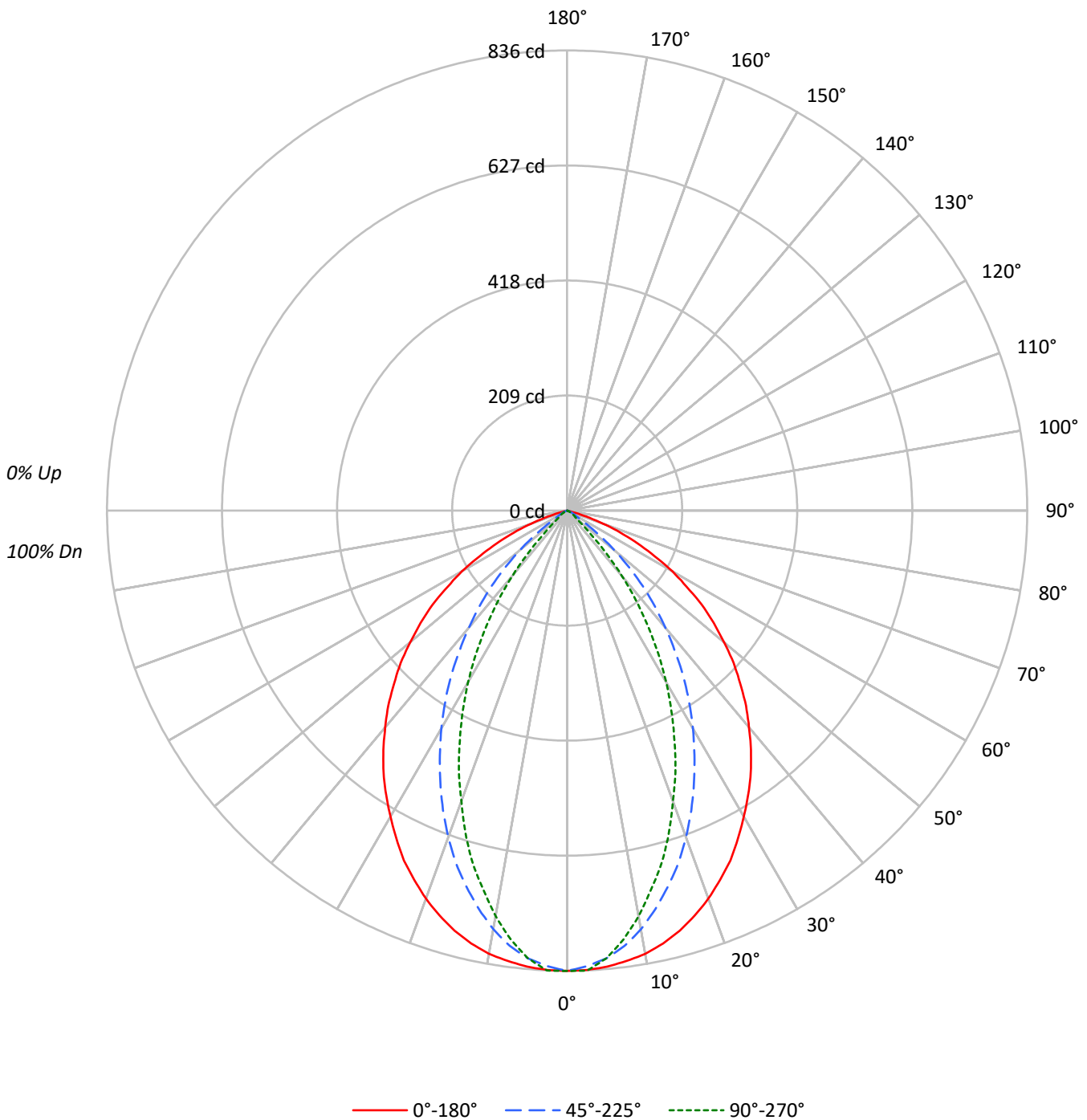
Lumens per Lamp: N/A  
Luminaire Lumens: 1080.4 lumens  
Efficiency: N/A  
Efficacy: 30.9 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
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	112	109	106	103	110	107	104	102	103	101	99		99	97	96		95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87		91	88	85		88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78		84	80	76		81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70		77	72	69		75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63		71	66	62		70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57		66	61	57		65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52		61	56	52		60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48		57	52	48		56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44		53	48	44		52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41		50	45	41		49	44	41	39

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

	0°	45°	90°
0°	5758	5758	5758
5°	5750	5643	5643
10°	5716	5400	5230
15°	5631	5041	4727
20°	5498	4624	4115
25°	5331	4140	3504
30°	5105	3632	2860
35°	4888	3097	2143
40°	4621	2499	1389
45°	4329	1891	602
50°	3983	1205	225
55°	3589	529	158
60°	3039	227	106
65°	2300	143	54
70°	1399	66	22
75°	293	29	29
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4329 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.1	7.1
10°-20°	201.0	18.6
20°-30°	258.0	23.9
30°-40°	242.9	22.5
40°-50°	169.8	15.7
50°-60°	90.7	8.4
60°-70°	36.2	3.3
70°-80°	4.7	0.4
80°-90°	0.0	0.0
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°	536.1	49.6
0°-40°	779.0	72.1
0°-60°	1039.5	96.2
0°-90°	1080.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1080.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	832	830	816	819	816	79
15°	790	765	707	674	663	222
25°	702	640	545	486	461	322
35°	582	489	368	285	255	363
45°	445	333	194	94	62	343
55°	299	183	44	15	13	265
65°	141	56	9	4	3	140
75°	11	3	1	1	1	21
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	836.3	836.3	836.3	836.3	836.3
2.5°	835.2	836.3	828.6	835.2	836.3
5°	831.9	829.7	816.5	818.7	816.5
7.5°	825.3	819.8	797.7	790.0	785.6
10°	817.6	805.4	772.3	755.8	748.1
12.5°	805.4	787.8	741.4	716.1	705.0
15°	790.0	764.6	707.2	674.1	663.1
17.5°	771.2	738.1	671.9	631.1	614.6
20°	750.3	706.1	631.1	582.6	561.6
22.5°	726.0	675.2	589.2	535.1	514.1
25°	701.7	639.9	545.0	485.5	461.2
27.5°	671.9	603.5	500.9	436.9	410.4
30°	642.1	567.1	456.8	387.3	359.7
32.5°	612.3	528.5	412.6	335.4	307.8
35°	581.5	488.8	368.5	284.7	254.9
37.5°	548.4	449.1	321.1	236.1	205.2
40°	514.1	410.4	278.0	188.7	154.5
42.5°	481.0	371.8	235.0	142.3	104.8
45°	444.6	333.2	194.2	93.8	61.8
47.5°	410.4	295.7	152.3	54.1	32.0
50°	371.8	257.1	112.5	28.7	21.0
52.5°	335.4	219.6	75.0	18.8	16.5
55°	299.0	183.2	44.1	15.4	13.2
57.5°	257.1	147.8	24.3	12.1	9.9
60°	220.7	115.8	16.5	8.8	7.7
62.5°	178.7	85.0	12.1	6.6	5.5
65°	141.2	56.3	8.8	4.4	3.3
67.5°	104.8	33.1	5.5	2.2	2.2
70°	69.5	17.7	3.3	1.1	1.1
72.5°	36.4	7.7	2.2	1.1	1.1
75°	11.0	3.3	1.1	1.1	1.1
77.5°	0.0	1.1	0.0	0.0	1.1
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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	15.03	16.29	15.39	16.60	16.92	0.00	0.00	0.00	0.00	0.00
	3H	15.61	16.72	15.99	17.05	17.42	0.00	0.00	0.00	0.00	0.00
	4H	15.57	16.61	15.98	16.96	17.34	0.00	0.00	0.00	0.00	0.00
	6H	15.49	16.43	15.90	16.80	17.20	0.00	0.00	0.00	0.00	0.00
	8H	15.44	16.33	15.87	16.73	17.13	0.00	0.00	0.00	0.00	0.00
	12H	15.40	16.25	15.83	16.63	17.06	0.00	0.00	0.00	0.00	0.00
4H	2H	14.80	15.83	15.20	16.18	16.57	0.00	0.00	0.00	0.00	0.00
	3H	15.39	16.23	15.80	16.63	17.03	0.00	0.00	0.00	0.00	0.00
	4H	15.34	16.08	15.78	16.50	16.95	0.00	0.00	0.00	0.00	0.00
	6H	15.25	15.89	15.72	16.34	16.81	0.00	0.00	0.00	0.00	0.00
	8H	15.19	15.79	15.66	16.23	16.71	0.00	0.00	0.00	0.00	0.00
	12H	15.14	15.66	15.63	16.15	16.62	0.00	0.00	0.00	0.00	0.00
8H	4H	15.19	15.79	15.66	16.23	16.71	0.00	0.00	0.00	0.00	0.00
	6H	15.09	15.57	15.59	16.06	16.55	0.00	0.00	0.00	0.00	0.00
	8H	15.02	15.45	15.54	15.97	16.46	0.00	0.00	0.00	0.00	0.00
	12H	14.97	15.35	15.49	15.85	16.42	0.00	0.00	0.00	0.00	0.00
12H	4H	15.14	15.66	15.63	16.15	16.62	0.00	0.00	0.00	0.00	0.00
	6H	15.02	15.45	15.54	15.97	16.46	0.00	0.00	0.00	0.00	0.00
	8H	14.97	15.35	15.49	15.85	16.42	0.00	0.00	0.00	0.00	0.00