

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: P1061890

Luminaire Tested: S125RDR-H1090D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061890  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1090D930-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

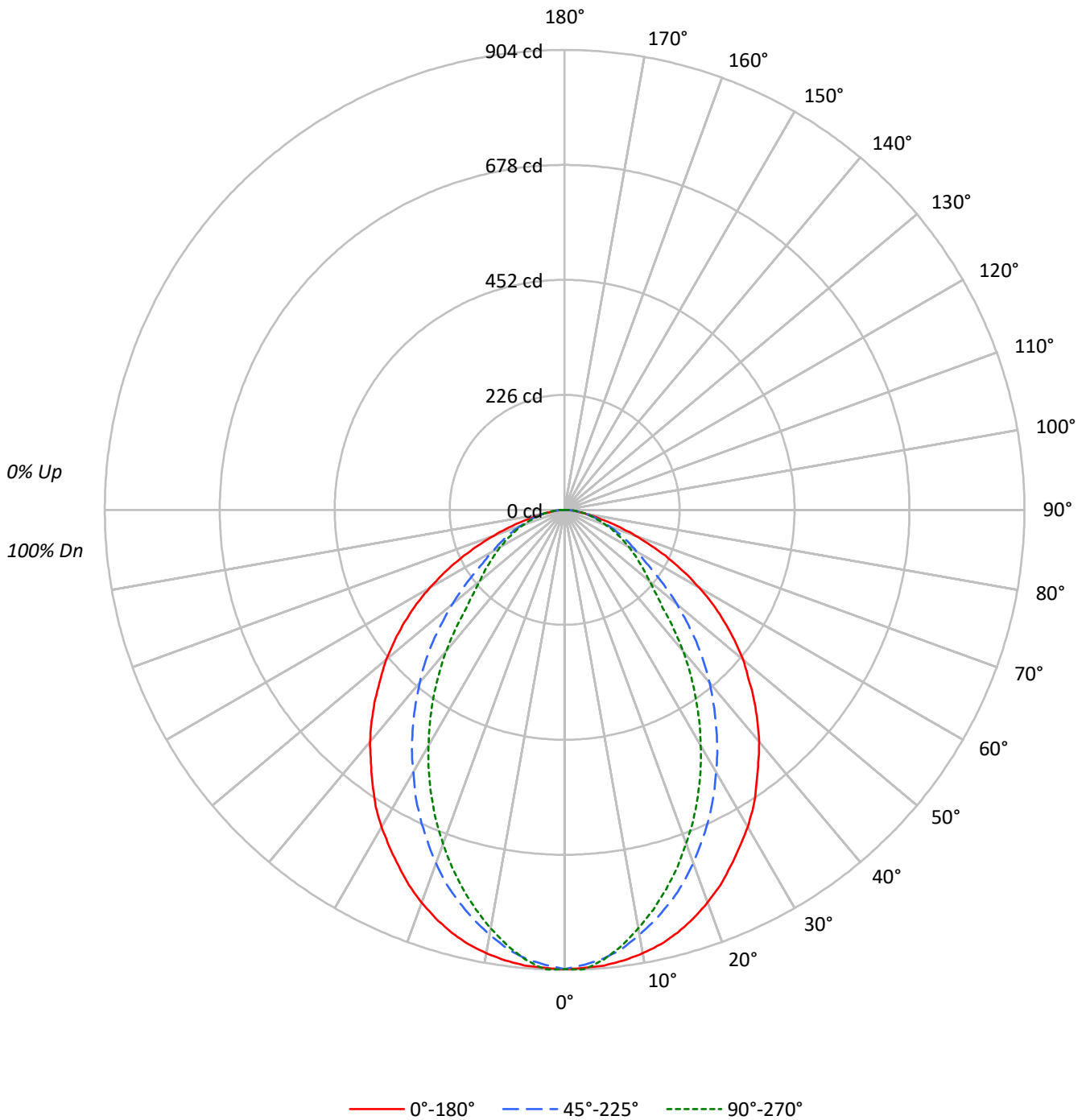
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1710.5 lumens  
Efficiency: N/A  
Efficacy: 54.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (Ain): 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57				57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50				50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45				45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40				40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36				36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				30

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

	0°	45°	90°
0°	6217	6217	6217
5°	6213	6119	6132
10°	6190	5929	5840
15°	6129	5695	5500
20°	6020	5416	5114
25°	5869	5095	4707
30°	5721	4731	4256
35°	5529	4367	3774
40°	5349	3983	3252
45°	5127	3561	2663
50°	4904	3087	2331
55°	4601	2577	2154
60°	4199	2254	2012
65°	3674	2061	1869
70°	2979	1856	1737
75°	2139	1695	1617
80°	1479	1515	1515
85°	1082	1319	1390

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5127 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.9	4.9
10°-20°	227.1	13.3
20°-30°	313.9	18.3
30°-40°	334.3	19.5
40°-50°	293.7	17.2
50°-60°	222.7	13.0
60°-70°	144.6	8.5
70°-80°	71.6	4.2
80°-90°	18.8	1.1
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°	624.9	36.5
0°-40°	959.2	56.1
0°-60°	1475.5	86.3
0°-90°	1710.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1710.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	903	903	903	903	903	
5°	899	897	885	888	887	85
15°	860	840	799	780	772	242
25°	772	730	671	636	620	356
35°	658	597	520	472	449	412
45°	526	453	366	300	274	406
55°	383	308	215	185	179	342
65°	226	168	126	117	115	223
75°	80	71	64	62	61	90
85°	14	16	17	17	18	17
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	902.9	902.9	902.9	902.9	902.9
2.5°	901.0	902.9	895.1	902.0	903.9
5°	899.0	897.1	885.3	888.2	887.2
7.5°	893.1	889.2	869.6	867.6	863.7
10°	885.3	875.5	848.0	841.2	835.3
12.5°	874.5	858.8	825.5	811.8	804.9
15°	859.8	840.2	799.0	780.4	771.6
17.5°	842.1	814.7	771.6	746.1	736.3
20°	821.6	789.2	739.2	709.8	698.0
22.5°	799.0	760.8	704.9	673.5	660.8
25°	772.5	730.4	670.6	636.3	619.6
27.5°	746.1	699.0	634.3	596.1	578.4
30°	719.6	665.7	595.1	553.9	535.3
32.5°	691.2	631.4	558.8	513.7	492.2
35°	657.8	597.1	519.6	472.5	449.0
37.5°	625.5	560.8	481.4	428.4	405.9
40°	595.1	526.5	443.1	385.3	361.8
42.5°	560.8	490.2	404.9	344.1	317.6
45°	526.5	452.9	365.7	300.0	273.5
47.5°	490.2	417.6	324.5	259.8	242.2
50°	457.8	381.4	288.2	229.4	217.6
52.5°	420.6	346.1	251.0	205.9	198.0
55°	383.3	307.8	214.7	185.3	179.4
57.5°	345.1	273.5	186.3	167.6	161.8
60°	304.9	238.2	163.7	149.0	146.1
62.5°	264.7	202.0	144.1	133.3	129.4
65°	225.5	167.6	126.5	116.7	114.7
67.5°	185.3	136.3	108.8	102.0	101.0
70°	148.0	110.8	92.2	88.2	86.3
72.5°	113.7	88.2	77.5	74.5	73.5
75°	80.4	70.6	63.7	61.8	60.8
77.5°	53.9	53.9	51.0	49.0	50.0
80°	37.3	39.2	38.2	38.2	38.2
82.5°	24.5	26.5	27.5	27.5	27.5
85°	13.7	15.7	16.7	16.7	17.6
87.5°	4.9	5.9	6.9	7.8	7.8
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	16.90	18.39	17.27	18.71	19.02	13.14	14.63	13.51	14.95	15.26
	3H	18.21	19.55	18.59	19.88	20.24	14.73	16.06	15.10	16.39	16.75
	4H	18.58	19.84	18.98	20.18	20.56	15.33	16.58	15.73	16.93	17.31
	6H	18.76	19.91	19.17	20.28	20.67	15.80	16.96	16.21	17.32	17.72
	8H	18.79	19.90	19.22	20.29	20.69	15.96	17.06	16.39	17.45	17.85
	12H	18.81	19.86	19.24	20.24	20.67	16.07	17.13	16.50	17.51	17.94
4H	2H	17.01	18.27	17.41	18.62	18.99	13.80	15.06	14.20	15.41	15.78
	3H	18.50	19.54	18.91	19.94	20.34	15.59	16.62	16.00	17.02	17.43
	4H	18.98	19.91	19.41	20.33	20.76	16.30	17.24	16.74	17.65	18.09
	6H	19.26	20.07	19.72	20.52	20.98	16.89	17.70	17.35	18.15	18.61
	8H	19.33	20.09	19.80	20.53	21.00	17.10	17.86	17.56	18.30	18.77
	12H	19.37	20.05	19.85	20.53	21.00	17.25	17.93	17.74	18.41	18.88
8H	4H	19.06	19.82	19.52	20.26	20.73	16.62	17.37	17.08	17.82	18.29
	6H	19.42	20.05	19.92	20.54	21.02	17.32	17.95	17.82	18.44	18.92
	8H	19.54	20.10	20.05	20.61	21.10	17.60	18.16	18.12	18.67	19.16
	12H	19.63	20.12	20.14	20.61	21.18	17.83	18.33	18.34	18.82	19.38
12H	4H	19.05	19.73	19.54	20.21	20.68	16.64	17.32	17.12	17.80	18.27
	6H	19.43	19.99	19.94	20.50	20.99	17.37	17.93	17.89	18.44	18.93
	8H	19.59	20.08	20.10	20.57	21.14	17.71	18.21	18.22	18.70	19.26