

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: P1061848

Luminaire Tested: S125RDR-H1090D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061848
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: S125RDR-H1090D835-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

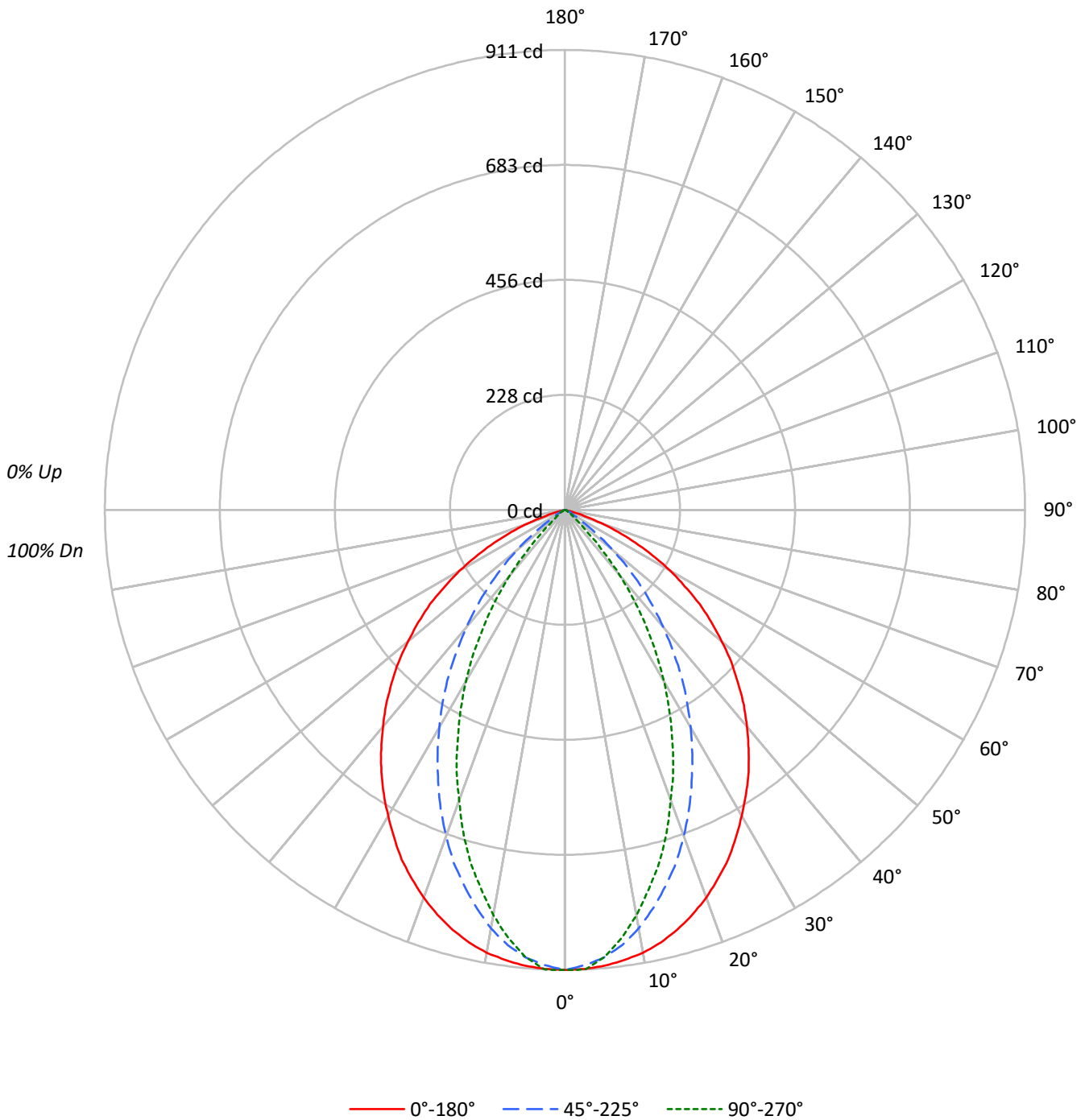
Lumens per Lamp: N/A
Luminaire Lumens: 1177.5 lumens
Efficiency: N/A
Efficacy: 37.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	6275	6275	6275
5°	6266	6150	6150
10°	6229	5885	5700
15°	6137	5494	5151
20°	5991	5040	4484
25°	5810	4513	3818
30°	5564	3958	3117
35°	5326	3376	2335
40°	5036	2723	1513
45°	4719	2060	655
50°	4340	1313	244
55°	3912	577	173
60°	3312	248	116
65°	2507	156	59
70°	1526	72	24
75°	319	32	32
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4719 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.0	7.1
10°-20°	219.0	18.6
20°-30°	281.2	23.9
30°-40°	264.7	22.5
40°-50°	185.1	15.7
50°-60°	98.9	8.4
60°-70°	39.4	3.3
70°-80°	5.1	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°	584.3	49.6
0°-40°	849.0	72.1
0°-60°	1132.9	96.2
0°-90°	1177.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1177.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	911	911	911	911	911	
5°	907	904	890	892	890	86
15°	861	833	771	735	723	242
25°	765	697	594	529	503	351
35°	634	533	402	310	278	395
45°	485	363	212	102	67	374
55°	326	200	48	17	14	289
65°	154	61	10	5	4	153
75°	12	4	1	1	1	23
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	911.4	911.4	911.4	911.4	911.4
2.5°	910.2	911.4	903.0	910.2	911.4
5°	906.6	904.2	889.8	892.2	889.8
7.5°	899.4	893.4	869.4	860.9	856.1
10°	891.0	877.8	841.7	823.7	815.3
12.5°	877.8	858.5	808.0	780.4	768.4
15°	860.9	833.3	770.8	734.7	722.7
17.5°	840.5	804.4	732.3	687.8	669.8
20°	817.7	769.6	687.8	634.9	612.0
22.5°	791.2	735.9	642.1	583.2	560.3
25°	764.8	697.4	594.0	529.1	502.6
27.5°	732.3	657.7	545.9	476.2	447.3
30°	699.8	618.1	497.8	422.1	392.0
32.5°	667.4	576.0	449.7	365.5	335.5
35°	633.7	532.7	401.6	310.2	277.8
37.5°	597.6	489.4	349.9	257.3	223.7
40°	560.3	447.3	303.0	205.6	168.3
42.5°	524.3	405.2	256.1	155.1	114.2
45°	484.6	363.1	211.6	102.2	67.3
47.5°	447.3	322.3	165.9	58.9	34.9
50°	405.2	280.2	122.6	31.3	22.8
52.5°	365.5	239.3	81.8	20.4	18.0
55°	325.9	199.6	48.1	16.8	14.4
57.5°	280.2	161.1	26.5	13.2	10.8
60°	240.5	126.3	18.0	9.6	8.4
62.5°	194.8	92.6	13.2	7.2	6.0
65°	153.9	61.3	9.6	4.8	3.6
67.5°	114.2	36.1	6.0	2.4	2.4
70°	75.8	19.2	3.6	1.2	1.2
72.5°	39.7	8.4	2.4	1.2	1.2
75°	12.0	3.6	1.2	1.2	1.2
77.5°	0.0	1.2	0.0	0.0	1.2
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	15.32	16.59	15.69	16.90	17.22	0.00	0.00	0.00	0.00	0.00
	3H	15.91	17.02	16.29	17.35	17.72	0.00	0.00	0.00	0.00	0.00
	4H	15.87	16.91	16.28	17.26	17.64	0.00	0.00	0.00	0.00	0.00
	6H	15.79	16.73	16.20	17.10	17.50	0.00	0.00	0.00	0.00	0.00
	8H	15.74	16.63	16.17	17.03	17.43	0.00	0.00	0.00	0.00	0.00
	12H	15.70	16.55	16.13	16.93	17.36	0.00	0.00	0.00	0.00	0.00
4H	2H	15.10	16.13	15.50	16.48	16.87	0.00	0.00	0.00	0.00	0.00
	3H	15.69	16.52	16.10	16.93	17.33	0.00	0.00	0.00	0.00	0.00
	4H	15.64	16.38	16.07	16.80	17.25	0.00	0.00	0.00	0.00	0.00
	6H	15.55	16.19	16.02	16.64	17.11	0.00	0.00	0.00	0.00	0.00
	8H	15.49	16.09	15.96	16.53	17.01	0.00	0.00	0.00	0.00	0.00
	12H	15.44	15.96	15.93	16.45	16.92	0.00	0.00	0.00	0.00	0.00
8H	4H	15.49	16.09	15.96	16.53	17.01	0.00	0.00	0.00	0.00	0.00
	6H	15.39	15.87	15.89	16.36	16.85	0.00	0.00	0.00	0.00	0.00
	8H	15.32	15.75	15.84	16.27	16.76	0.00	0.00	0.00	0.00	0.00
	12H	15.27	15.65	15.79	16.15	16.72	0.00	0.00	0.00	0.00	0.00
12H	4H	15.44	15.96	15.93	16.45	16.92	0.00	0.00	0.00	0.00	0.00
	6H	15.32	15.75	15.84	16.27	16.76	0.00	0.00	0.00	0.00	0.00
	8H	15.27	15.65	15.79	16.15	16.72	0.00	0.00	0.00	0.00	0.00