

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: P1061986

Luminaire Tested: S125RDR-H1270D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061986
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D940-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

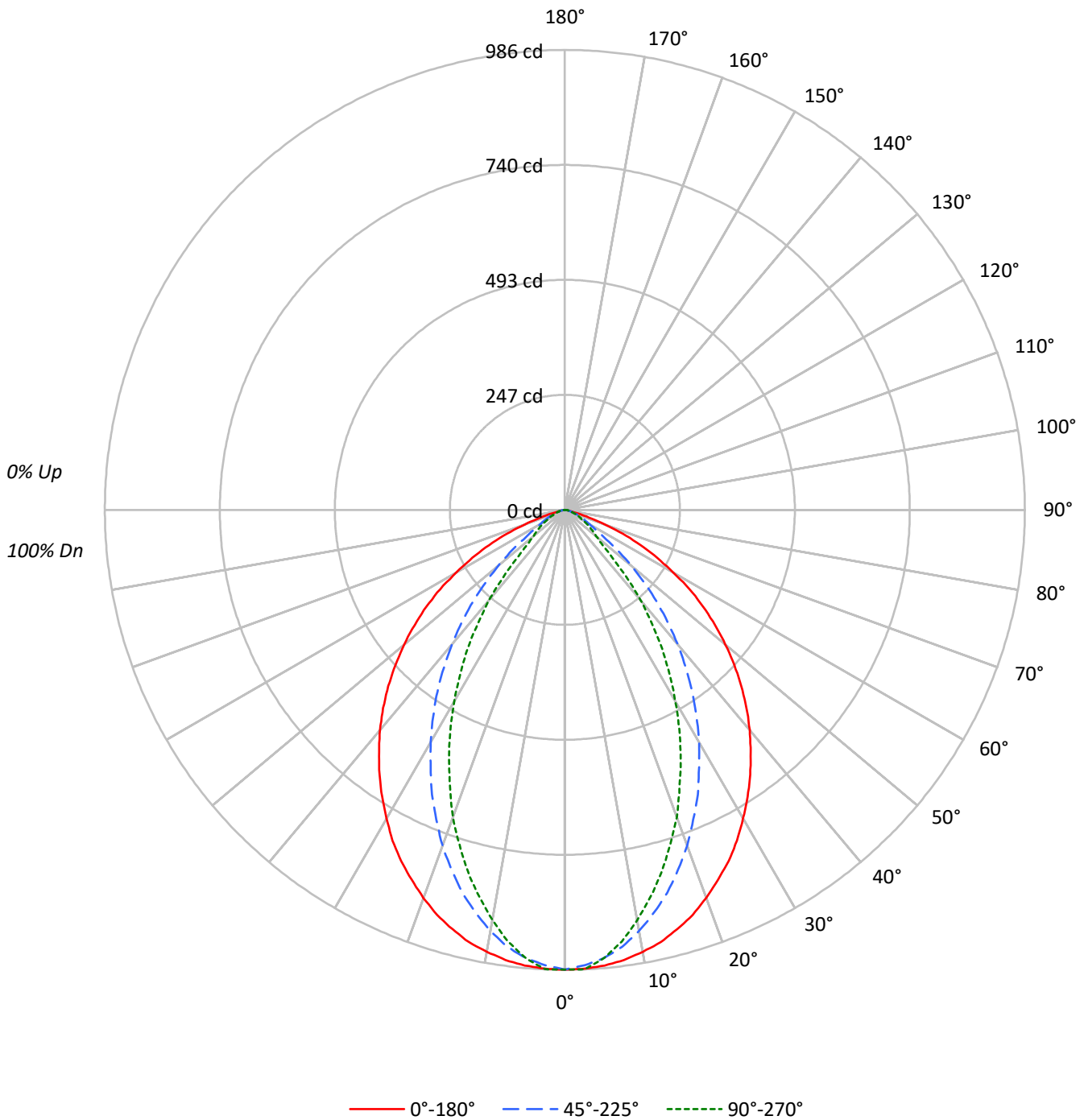
Lumens per Lamp: N/A
Luminaire Lumens: 1425.8 lumens
Efficiency: N/A
Efficacy: 39.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6787	6787	6787
5°	6779	6666	6666
10°	6726	6410	6244
15°	6634	6054	5723
20°	6489	5617	5140
25°	6309	5120	4463
30°	6075	4571	3765
35°	5822	4001	3054
40°	5539	3378	2263
45°	5208	2708	1366
50°	4817	1986	939
55°	4345	1218	781
60°	3692	828	621
65°	2918	632	490
70°	1840	453	403
75°	599	333	333
80°	198	250	297
85°	103	197	197

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5208 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.2	6.4
10°-20°	240.8	16.9
20°-30°	316.7	22.2
30°-40°	311.2	21.8
40°-50°	235.4	16.5
50°-60°	142.8	10.0
60°-70°	67.4	4.7
70°-80°	17.6	1.2
80°-90°	2.7	0.2
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°	648.7	45.5
0°-40°	959.9	67.3
0°-60°	1338.1	93.9
0°-90°	1425.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1425.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	986	986	986	986	986	
5°	981	978	964	966	964	93
15°	931	906	849	817	803	262
25°	830	768	674	611	588	382
35°	693	600	476	392	363	433
45°	535	421	278	177	140	412
55°	362	248	102	69	65	322
65°	179	91	39	33	30	177
75°	22	15	12	12	12	35
85°	1	1	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	985.8	985.8	985.8	985.8	985.8
2.5°	984.6	984.6	977.1	985.8	985.8
5°	980.8	978.3	964.5	965.8	964.5
7.5°	973.3	968.3	944.5	938.2	933.2
10°	962.0	952.0	916.9	901.9	893.1
12.5°	949.5	932.0	884.4	863.1	849.3
15°	930.7	905.7	849.3	816.7	802.9
17.5°	910.7	874.3	808.0	769.1	751.6
20°	885.6	843.0	766.6	719.0	701.5
22.5°	858.1	808.0	719.0	666.4	642.6
25°	830.5	767.9	673.9	611.3	587.5
27.5°	799.2	727.8	622.6	557.4	531.1
30°	764.1	687.7	575.0	507.3	473.5
32.5°	729.0	646.4	524.9	451.0	417.1
35°	692.7	600.0	476.0	392.1	363.3
37.5°	653.9	556.2	425.9	338.2	304.4
40°	616.3	512.3	375.8	283.1	251.8
42.5°	576.2	468.5	325.7	229.2	194.2
45°	534.9	420.9	278.1	176.6	140.3
47.5°	492.3	378.3	230.5	130.3	105.2
50°	449.7	333.2	185.4	96.5	87.7
52.5°	405.9	289.4	140.3	80.2	76.4
55°	362.0	248.0	101.5	68.9	65.1
57.5°	316.9	202.9	76.4	58.9	55.1
60°	268.1	162.8	60.1	48.9	45.1
62.5°	223.0	127.8	48.9	40.1	37.6
65°	179.1	91.4	38.8	32.6	30.1
67.5°	134.0	61.4	30.1	25.1	25.1
70°	91.4	40.1	22.5	20.0	20.0
72.5°	55.1	23.8	16.3	16.3	16.3
75°	22.5	15.0	12.5	12.5	12.5
77.5°	7.5	8.8	8.8	10.0	10.0
80°	5.0	5.0	6.3	7.5	7.5
82.5°	2.5	3.8	3.8	5.0	5.0
85°	1.3	1.3	2.5	2.5	2.5
87.5°	0.0	0.0	0.0	1.3	1.3
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	15.98	17.31	16.35	17.63	17.94	6.64	7.97	7.01	8.29	8.60
	3H	16.69	17.87	17.07	18.20	18.56	7.42	8.60	7.80	8.93	9.29
	4H	16.70	17.80	17.11	18.15	18.53	7.67	8.77	8.07	9.12	9.50
	6H	16.63	17.64	17.05	18.01	18.40	7.85	8.85	8.26	9.22	9.62
	8H	16.59	17.55	17.02	17.94	18.34	7.89	8.84	8.32	9.23	9.64
	12H	16.55	17.46	16.98	17.84	18.27	7.90	8.81	8.33	9.19	9.62
4H	2H	15.81	16.91	16.22	17.26	17.64	7.13	8.22	7.53	8.57	8.96
	3H	16.56	17.45	16.97	17.85	18.26	8.03	8.93	8.45	9.33	9.73
	4H	16.58	17.37	17.01	17.79	18.23	8.35	9.14	8.78	9.56	10.00
	6H	16.52	17.20	16.98	17.65	18.11	8.60	9.29	9.07	9.73	10.20
	8H	16.46	17.10	16.93	17.55	18.02	8.67	9.31	9.14	9.75	10.23
	12H	16.42	16.98	16.91	17.47	17.94	8.69	9.26	9.18	9.74	10.21
8H	4H	16.46	17.10	16.93	17.54	18.02	8.46	9.10	8.93	9.54	10.01
	6H	16.38	16.90	16.89	17.40	17.88	8.78	9.29	9.28	9.79	10.27
	8H	16.33	16.80	16.85	17.31	17.80	8.88	9.35	9.40	9.86	10.35
	12H	16.29	16.70	16.81	17.20	17.77	8.94	9.35	9.46	9.85	10.42
12H	4H	16.42	16.98	16.90	17.46	17.94	8.43	8.99	8.92	9.48	9.95
	6H	16.33	16.79	16.85	17.31	17.80	8.75	9.21	9.27	9.73	10.22
	8H	16.29	16.70	16.81	17.20	17.77	8.89	9.30	9.40	9.79	10.36