

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: P1061954

Luminaire Tested: S125RDR-H1270D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061954
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D850-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

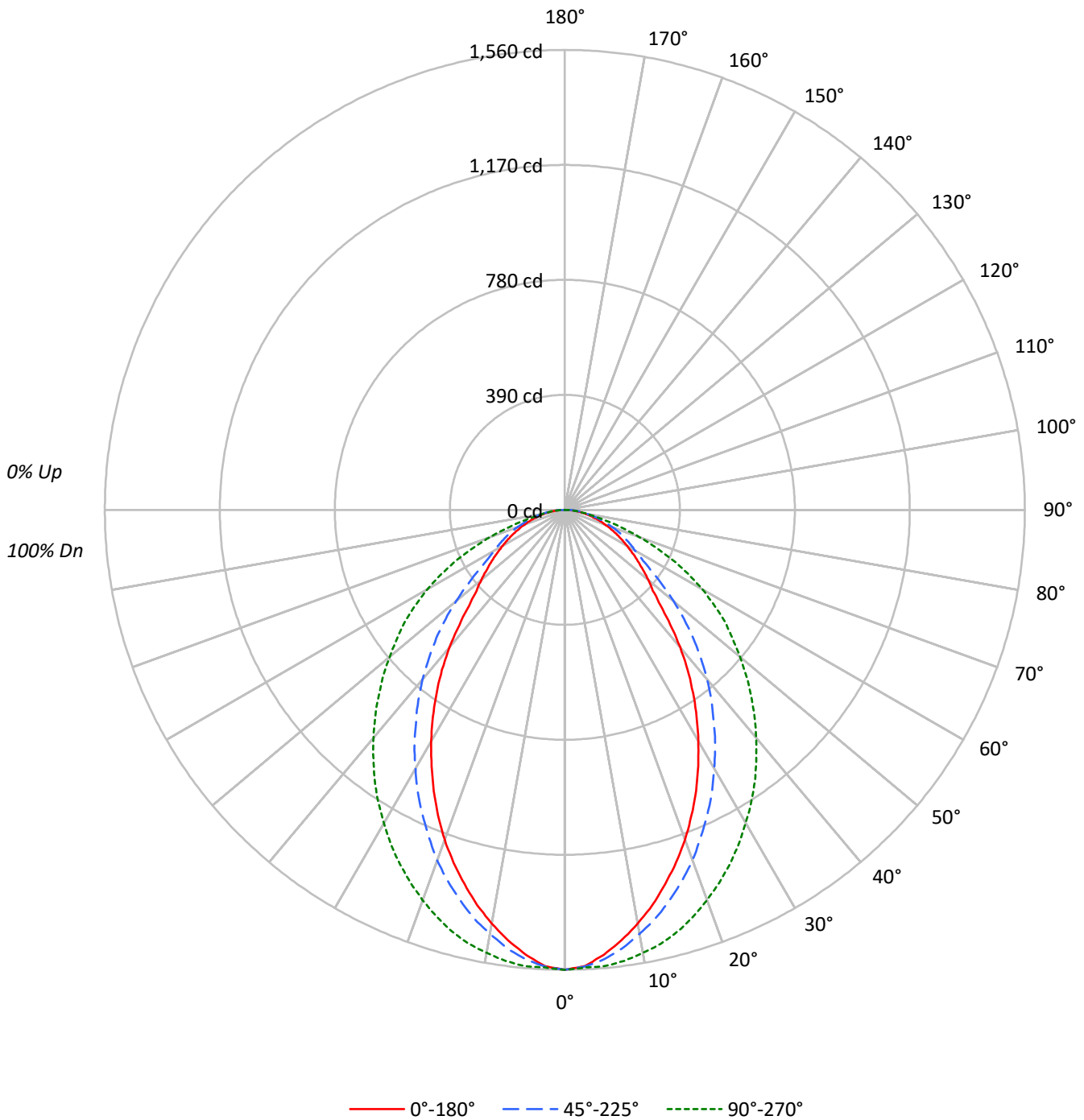
Lumens per Lamp: N/A
Luminaire Lumens: 2924.7 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86		
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74		
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64		
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56		
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50		
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44		
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40		
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36		
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33		
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10742	10742	10742
5°	10470	10578	10740
10°	9959	10210	10668
15°	9366	9776	10554
20°	8725	9273	10324
25°	7992	8679	10065
30°	7199	8055	9752
35°	6367	7402	9445
40°	5463	6738	9078
45°	4462	5994	8696
50°	3957	5142	8297
55°	3630	4266	7951
60°	3348	3777	7404
65°	3123	3631	6601
70°	2917	3450	5397
75°	2695	3235	3980
80°	2534	3029	2906
85°	2338	2955	2465

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8696 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.4	4.9
10°-20°	388.9	13.3
20°-30°	534.5	18.3
30°-40°	566.5	19.4
40°-50°	494.5	16.9
50°-60°	375.6	12.8
60°-70°	251.7	8.6
70°-80°	129.8	4.4
80°-90°	38.9	1.3
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°	1067.8	36.5
0°-40°	1634.2	55.9
0°-60°	2504.3	85.6
0°-90°	2924.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2924.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1560	1560	1560	1560	1560	
5°	1515	1530	1530	1541	1554	142
15°	1314	1339	1372	1432	1481	369
25°	1052	1085	1142	1238	1325	482
35°	758	801	881	1005	1124	472
45°	458	503	616	762	893	362
55°	302	312	355	522	662	271
65°	192	196	223	298	405	190
75°	101	108	122	129	150	108
85°	30	37	37	34	31	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1560.1	1560.1	1560.1	1560.1	1560.1
2.5°	1549.2	1560.1	1550.8	1550.8	1553.9
5°	1514.9	1530.5	1530.5	1541.4	1553.9
7.5°	1472.9	1490.0	1499.4	1524.3	1543.0
10°	1424.5	1443.2	1460.4	1497.8	1525.8
12.5°	1373.1	1393.4	1419.9	1468.2	1507.1
15°	1313.9	1338.8	1371.5	1432.3	1480.6
17.5°	1254.7	1279.6	1320.1	1391.8	1446.4
20°	1190.8	1217.3	1265.6	1343.5	1409.0
22.5°	1122.2	1151.8	1203.2	1292.1	1368.4
25°	1052.0	1084.8	1142.4	1237.5	1324.8
27.5°	978.8	1017.8	1080.1	1181.4	1278.0
30°	905.5	944.5	1013.1	1123.7	1226.6
32.5°	832.3	874.4	949.2	1066.1	1176.7
35°	757.5	801.1	880.6	1005.3	1123.7
37.5°	684.2	727.9	816.7	946.1	1066.1
40°	607.8	653.0	749.7	885.3	1010.0
42.5°	529.9	578.2	682.7	822.9	952.3
45°	458.2	503.4	615.6	762.1	893.1
47.5°	405.2	434.8	548.6	699.8	835.4
50°	369.4	385.0	480.0	639.0	774.6
52.5°	333.5	346.0	416.1	576.7	716.9
55°	302.4	311.7	355.4	522.1	662.4
57.5°	271.2	280.5	308.6	467.6	598.5
60°	243.1	250.9	274.3	409.9	537.7
62.5°	216.6	222.9	247.8	355.4	472.2
65°	191.7	196.4	222.9	297.7	405.2
67.5°	166.8	171.4	197.9	243.1	333.5
70°	144.9	146.5	171.4	197.9	268.1
72.5°	123.1	124.7	144.9	160.5	205.7
75°	101.3	107.5	121.6	129.4	149.6
77.5°	82.6	90.4	98.2	101.3	101.3
80°	63.9	73.3	76.4	76.4	73.3
82.5°	46.8	54.6	56.1	53.0	49.9
85°	29.6	37.4	37.4	34.3	31.2
87.5°	14.0	20.3	20.3	18.7	14.0
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	14.85	16.35	15.22	16.66	16.98	18.78	20.28	19.15	20.59	20.91
	3H	16.43	17.77	16.80	18.10	18.46	20.21	21.55	20.58	21.88	22.24
	4H	17.04	18.30	17.44	18.65	19.03	20.62	21.88	21.02	22.23	22.61
	6H	17.53	18.70	17.95	19.06	19.46	20.84	22.00	21.25	22.37	22.76
	8H	17.71	18.82	18.14	19.21	19.61	20.90	22.00	21.32	22.39	22.79
	12H	17.83	18.89	18.26	19.27	19.70	20.93	21.99	21.36	22.37	22.80
4H	2H	15.59	16.85	15.99	17.20	17.58	18.91	20.17	19.31	20.52	20.90
	3H	17.37	18.42	17.78	18.82	19.22	20.52	21.56	20.93	21.96	22.37
	4H	18.11	19.05	18.54	19.46	19.90	21.05	21.99	21.48	22.40	22.84
	6H	18.74	19.56	19.20	20.00	20.46	21.39	22.21	21.85	22.65	23.11
	8H	18.97	19.74	19.44	20.18	20.65	21.49	22.25	21.95	22.70	23.16
	12H	19.15	19.83	19.63	20.31	20.78	21.56	22.24	22.04	22.72	23.19
8H	4H	18.51	19.27	18.97	19.72	20.18	21.15	21.92	21.62	22.36	22.83
	6H	19.29	19.93	19.79	20.42	20.90	21.59	22.22	22.09	22.71	23.19
	8H	19.62	20.19	20.13	20.70	21.18	21.75	22.32	22.26	22.83	23.32
	12H	19.89	20.39	20.40	20.89	21.45	21.89	22.39	22.40	22.88	23.44
12H	4H	18.55	19.23	19.03	19.71	20.18	21.15	21.84	21.64	22.31	22.79
	6H	19.38	19.94	19.89	20.45	20.94	21.61	22.18	22.12	22.69	23.17
	8H	19.77	20.27	20.28	20.77	21.33	21.82	22.32	22.33	22.81	23.38