

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: P1061548

Luminaire Tested: S125RDRP-S1270D850-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061548
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: S125RDRP-S1270D850-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

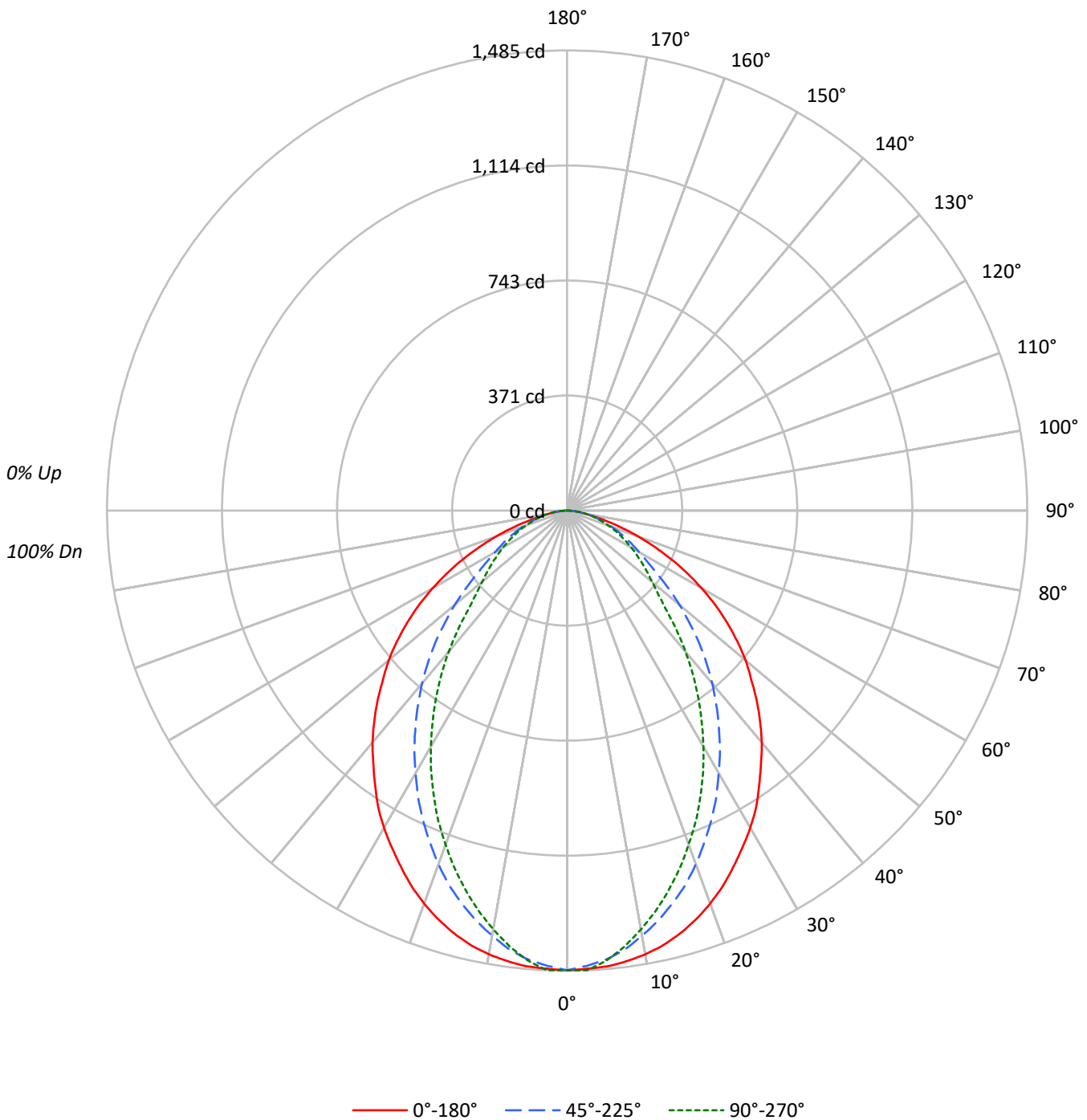
Lumens per Lamp: N/A
Luminaire Lumens: 2809.8 lumens
Efficiency: N/A
Efficacy: 67.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (A_{in}): 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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	60	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°	10212	10212	10212
5°	10207	10051	10074
10°	10167	9739	9593
15°	10068	9356	9034
20°	9889	8897	8401
25°	9641	8368	7732
30°	9398	7772	6991
35°	9083	7174	6200
40°	8786	6542	5342
45°	8421	5849	4375
50°	8056	5072	3829
55°	7559	4234	3538
60°	6898	3703	3305
65°	6035	3384	3069
70°	4896	3048	2853
75°	3514	2785	2655
80°	2427	2490	2490
85°	1777	2165	2291

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8421 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.9	4.9
10°-20°	373.0	13.3
20°-30°	515.6	18.3
30°-40°	549.1	19.5
40°-50°	482.4	17.2
50°-60°	365.8	13.0
60°-70°	237.5	8.5
70°-80°	117.7	4.2
80°-90°	30.8	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°	1026.5	36.5
0°-40°	1575.6	56.1
0°-60°	2423.8	86.3
0°-90°	2809.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2809.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1483	1483	1483	1483	1483	
5°	1477	1474	1454	1459	1458	140
15°	1412	1380	1312	1282	1267	398
25°	1269	1200	1102	1045	1018	585
35°	1081	981	854	776	738	676
45°	865	744	601	493	449	667
55°	630	506	353	304	295	562
65°	370	275	208	192	188	366
75°	132	116	105	102	100	147
85°	22	26	27	27	29	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1483.2	1483.2	1483.2	1483.2	1483.2
2.5°	1480.0	1483.2	1470.3	1481.6	1484.8
5°	1476.8	1473.6	1454.2	1459.1	1457.5
7.5°	1467.1	1460.7	1428.5	1425.2	1418.8
10°	1454.2	1438.1	1393.0	1381.8	1372.1
12.5°	1436.5	1410.8	1356.0	1333.5	1322.2
15°	1412.4	1380.2	1312.5	1281.9	1267.4
17.5°	1383.4	1338.3	1267.4	1225.6	1209.4
20°	1349.6	1296.4	1214.3	1166.0	1146.6
22.5°	1312.5	1249.7	1157.9	1106.4	1085.4
25°	1269.0	1199.8	1101.5	1045.2	1017.8
27.5°	1225.6	1148.3	1042.0	979.2	950.2
30°	1182.1	1093.5	977.5	909.9	879.3
32.5°	1135.4	1037.1	918.0	843.9	808.4
35°	1080.6	980.8	853.5	776.2	737.6
37.5°	1027.5	921.2	790.7	703.8	666.7
40°	977.5	864.8	727.9	632.9	594.3
42.5°	921.2	805.2	665.1	565.3	521.8
45°	864.8	744.0	600.7	492.8	449.3
47.5°	805.2	686.1	533.1	426.8	397.8
50°	752.1	626.5	473.5	376.8	357.5
52.5°	690.9	568.5	412.3	338.2	325.3
55°	629.7	505.7	352.7	304.4	294.7
57.5°	566.9	449.3	306.0	275.4	265.7
60°	500.9	391.3	268.9	244.8	240.0
62.5°	434.8	331.8	236.7	219.0	212.6
65°	370.4	275.4	207.7	191.6	188.4
67.5°	304.4	223.9	178.8	167.5	165.9
70°	243.2	182.0	151.4	144.9	141.7
72.5°	186.8	144.9	127.2	122.4	120.8
75°	132.1	116.0	104.7	101.5	99.8
77.5°	88.6	88.6	83.7	80.5	82.1
80°	61.2	64.4	62.8	62.8	62.8
82.5°	40.3	43.5	45.1	45.1	45.1
85°	22.5	25.8	27.4	27.4	29.0
87.5°	8.1	9.7	11.3	12.9	12.9
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	18.63	20.12	18.99	20.43	20.75	14.87	16.36	15.23	16.67	16.99
	3H	19.94	21.27	20.32	21.60	21.96	16.45	17.79	16.83	18.12	18.48
	4H	20.31	21.56	20.71	21.91	22.29	17.05	18.31	17.45	18.66	19.03
	6H	20.48	21.64	20.90	22.01	22.40	17.52	18.68	17.94	19.05	19.44
	8H	20.52	21.62	20.95	22.01	22.41	17.68	18.79	18.11	19.17	19.58
	12H	20.53	21.59	20.96	21.97	22.40	17.80	18.85	18.23	19.23	19.66
4H	2H	18.74	19.99	19.14	20.34	20.72	15.53	16.78	15.93	17.13	17.51
	3H	20.23	21.26	20.64	21.66	22.06	17.31	18.35	17.72	18.75	19.15
	4H	20.70	21.63	21.13	22.05	22.49	18.03	18.96	18.46	19.38	19.82
	6H	20.99	21.80	21.44	22.24	22.70	18.62	19.43	19.08	19.87	20.33
	8H	21.06	21.81	21.52	22.26	22.73	18.82	19.58	19.29	20.02	20.49
	12H	21.10	21.77	21.58	22.25	22.72	18.98	19.65	19.46	20.13	20.60
8H	4H	20.78	21.54	21.25	21.99	22.45	18.34	19.10	18.80	19.54	20.01
	6H	21.15	21.77	21.64	22.26	22.74	19.05	19.67	19.54	20.16	20.64
	8H	21.26	21.82	21.78	22.33	22.82	19.33	19.89	19.84	20.40	20.88
	12H	21.35	21.85	21.86	22.34	22.90	19.56	20.05	20.07	20.54	21.11
12H	4H	20.78	21.45	21.26	21.93	22.40	18.37	19.04	18.85	19.52	19.99
	6H	21.15	21.71	21.67	22.22	22.71	19.10	19.66	19.61	20.17	20.66
	8H	21.31	21.81	21.82	22.30	22.86	19.43	19.93	19.94	20.42	20.99