

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: P1061922

Luminaire Tested: S125RDR-H1270D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061922
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D830-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

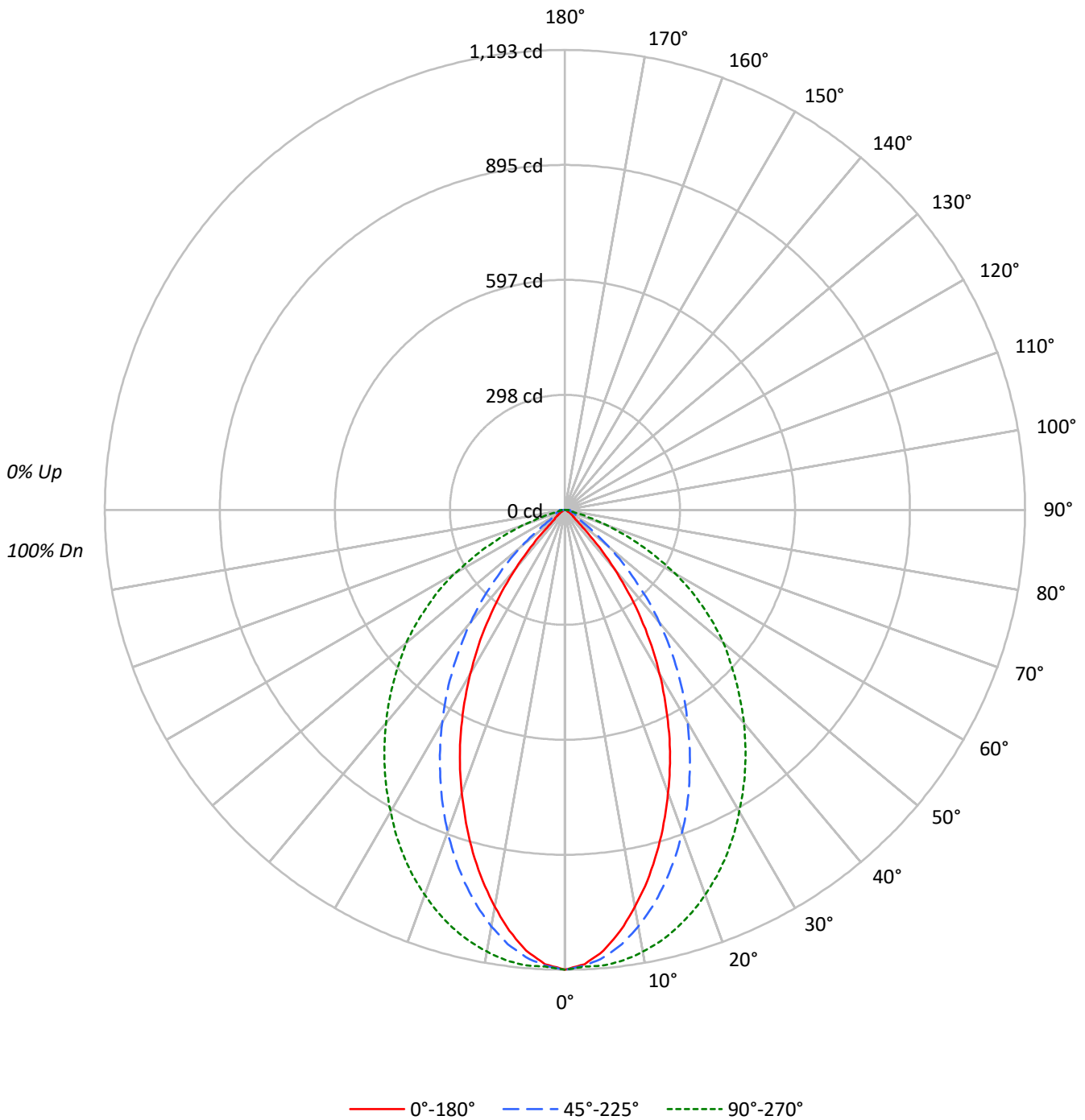
Lumens per Lamp: N/A
Luminaire Lumens: 1543.3 lumens
Efficiency: N/A
Efficacy: 42.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65				65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59				59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53				53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45				45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41				41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38				38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8213	8213	8213
5°	7933	8052	8198
10°	7311	7672	8136
15°	6566	7142	8002
20°	5730	6516	7788
25°	4853	5809	7522
30°	3899	5058	7186
35°	2886	4267	6851
40°	1787	3407	6492
45°	697	2491	6104
50°	327	1562	5750
55°	239	669	5218
60°	164	475	4526
65°	108	497	3519
70°	107	453	2214
75°	141	458	705
80°	210	527	472
85°	316	1051	735

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6104 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.4	7.1
10°-20°	283.4	18.4
20°-30°	361.0	23.4
30°-40°	336.0	21.8
40°-50°	231.3	15.0
50°-60°	130.9	8.5
60°-70°	61.9	4.0
70°-80°	19.3	1.3
80°-90°	10.1	0.7
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°	753.8	48.8
0°-40°	1089.8	70.6
0°-60°	1452.0	94.1
0°-90°	1543.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1543.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1193	1193	1193	1193	1193	
5°	1148	1164	1165	1176	1186	106
15°	921	952	1002	1078	1123	256
25°	639	680	765	893	990	291
35°	343	391	508	681	815	212
45°	72	114	256	463	627	67
55°	20	22	56	266	435	18
65°	7	8	30	95	216	7
75°	5	12	17	19	26	6
85°	4	11	13	12	9	4
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1192.8	1192.8	1192.8	1192.8	1192.8
2.5°	1179.6	1191.5	1183.6	1184.9	1186.2
5°	1147.8	1163.7	1165.0	1175.6	1186.2
7.5°	1101.4	1121.3	1135.8	1161.0	1178.3
10°	1045.7	1069.6	1097.4	1138.5	1163.7
12.5°	986.1	1013.9	1052.3	1110.7	1146.4
15°	921.1	951.6	1002.0	1077.5	1122.6
17.5°	852.2	886.7	947.6	1037.8	1094.8
20°	782.0	819.1	889.3	992.7	1062.9
22.5°	711.7	750.2	828.4	943.7	1028.5
25°	638.8	679.9	764.7	893.3	990.1
27.5°	564.6	607.0	701.1	841.6	949.0
30°	490.4	535.4	636.2	788.6	903.9
32.5°	417.5	462.6	572.6	735.6	860.2
35°	343.3	391.0	507.6	681.2	815.1
37.5°	269.0	320.7	444.0	625.6	768.7
40°	198.8	247.8	379.1	571.2	722.3
42.5°	132.5	180.3	320.7	516.9	674.6
45°	71.6	114.0	255.8	462.6	626.9
47.5°	38.4	61.0	200.1	409.5	580.5
50°	30.5	34.5	145.8	360.5	536.8
52.5°	25.2	27.8	95.4	314.1	486.4
55°	19.9	22.5	55.7	266.4	434.7
57.5°	15.9	18.6	35.8	221.3	384.4
60°	11.9	14.6	34.5	177.6	328.7
62.5°	9.3	10.6	31.8	136.5	270.4
65°	6.6	8.0	30.5	95.4	216.0
67.5°	5.3	6.6	27.8	61.0	161.7
70°	5.3	5.3	22.5	39.8	110.0
72.5°	5.3	9.3	19.9	26.5	66.3
75°	5.3	11.9	17.2	18.6	26.5
77.5°	5.3	13.3	14.6	14.6	14.6
80°	5.3	11.9	13.3	13.3	11.9
82.5°	5.3	10.6	11.9	13.3	10.6
85°	4.0	10.6	13.3	11.9	9.3
87.5°	4.0	10.6	11.9	10.6	6.6
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	0.00	0.00	0.00	0.00	0.20	16.56	17.85	16.93	18.16	18.48
	3H	0.00	0.00	0.00	0.22	0.58	17.28	18.42	17.66	18.75	19.12
	4H	0.00	0.70	0.04	1.05	1.44	17.30	18.37	17.71	18.72	19.10
	6H	0.90	1.88	1.32	2.25	2.64	17.25	18.23	17.67	18.60	19.00
	8H	1.54	2.46	1.97	2.86	3.26	17.23	18.15	17.66	18.55	18.95
	12H	2.13	3.02	2.57	3.40	3.83	17.22	18.10	17.65	18.48	18.91
4H	2H	1.08	2.14	1.48	2.49	2.88	16.35	17.41	16.75	17.77	18.15
	3H	1.89	2.76	2.30	3.16	3.56	17.11	17.98	17.52	18.38	18.78
	4H	2.89	3.67	3.33	4.09	4.53	17.14	17.91	17.57	18.33	18.78
	6H	4.17	4.84	4.64	5.29	5.75	17.12	17.78	17.58	18.23	18.70
	8H	4.75	5.37	5.22	5.82	6.29	17.10	17.72	17.57	18.17	18.64
	12H	5.32	5.87	5.80	6.35	6.82	17.11	17.66	17.60	18.14	18.62
8H	4H	4.31	4.93	4.78	5.38	5.85	17.02	17.64	17.49	18.09	18.56
	6H	5.87	6.38	6.37	6.88	7.36	17.01	17.52	17.51	18.02	18.50
	8H	6.66	7.12	7.19	7.64	8.13	17.02	17.48	17.55	18.00	18.49
	12H	7.50	7.91	8.02	8.40	8.97	17.08	17.49	17.60	17.98	18.55
12H	4H	4.53	5.08	5.02	5.56	6.04	16.98	17.53	17.47	18.01	18.49
	6H	6.24	6.70	6.76	7.21	7.71	16.96	17.42	17.49	17.94	18.43
	8H	7.23	7.63	7.75	8.13	8.70	17.01	17.42	17.53	17.91	18.48