

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: P1061935

Luminaire Tested: S125RDR-H1270D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061935
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: S125RDR-H1270D835-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

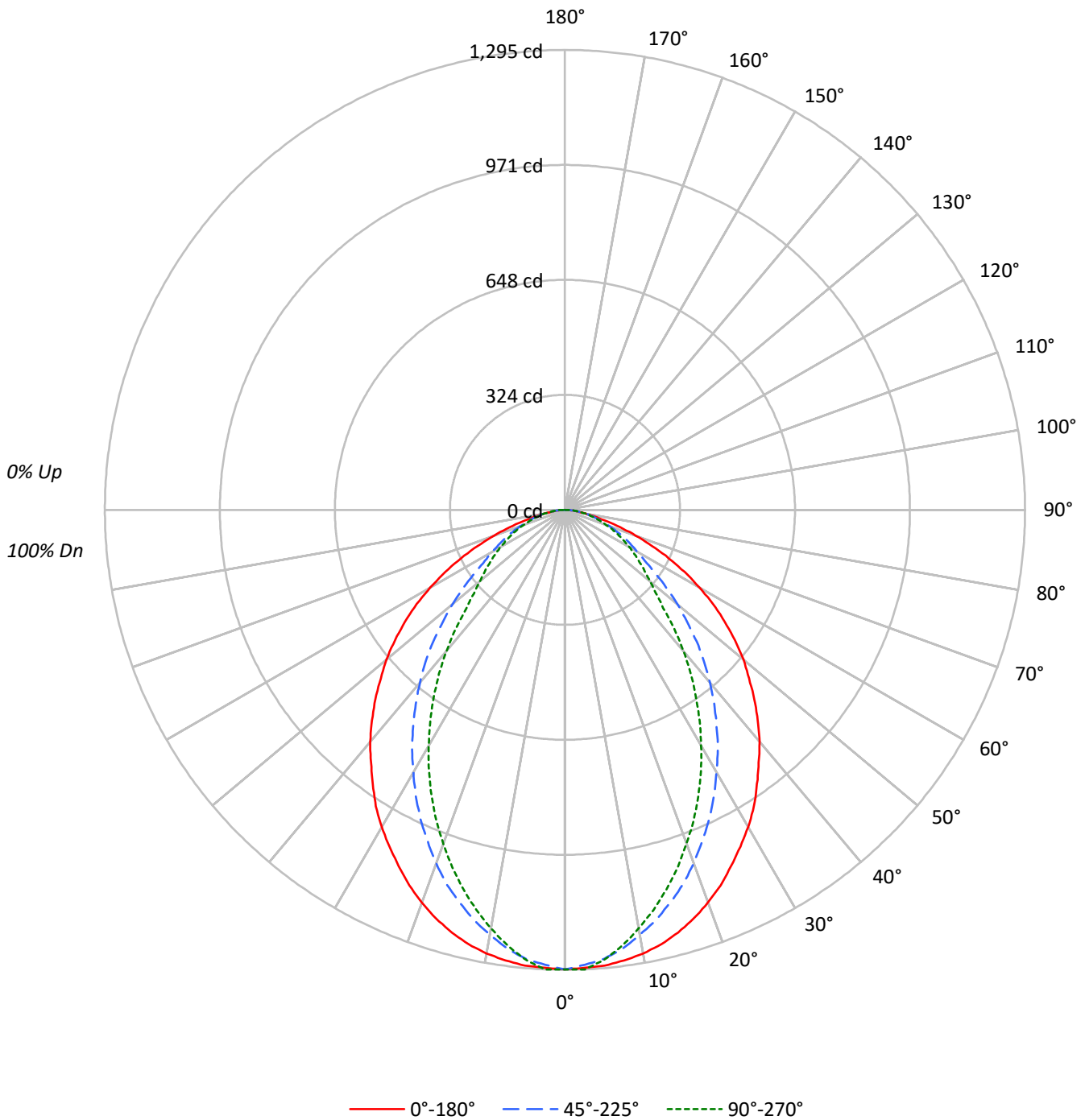
Lumens per Lamp: N/A
Luminaire Lumens: 2450.8 lumens
Efficiency: N/A
Efficacy: 67.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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				
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	76	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°	8908	8908	8908
5°	8903	8767	8787
10°	8869	8495	8367
15°	8781	8160	7880
20°	8625	7761	7329
25°	8409	7299	6745
30°	8198	6779	6098
35°	7923	6258	5408
40°	7664	5707	4659
45°	7345	5102	3816
50°	7027	4424	3340
55°	6593	3692	3086
60°	6016	3231	2882
65°	5264	2952	2678
70°	4270	2657	2488
75°	3065	2429	2317
80°	2117	2173	2173
85°	1556	1888	1999

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7345 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.3	4.9
10°-20°	325.4	13.3
20°-30°	449.7	18.3
30°-40°	479.0	19.5
40°-50°	420.8	17.2
50°-60°	319.1	13.0
60°-70°	207.2	8.5
70°-80°	102.6	4.2
80°-90°	26.9	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°	895.3	36.5
0°-40°	1374.3	56.1
0°-60°	2114.2	86.3
0°-90°	2450.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2450.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1294	1294	1294	1294	1294	
5°	1288	1285	1268	1273	1271	122
15°	1232	1204	1145	1118	1106	347
25°	1107	1046	961	912	888	510
35°	943	856	744	677	643	590
45°	754	649	524	430	392	582
55°	549	441	308	266	257	490
65°	323	240	181	167	164	319
75°	115	101	91	88	87	128
85°	20	22	24	24	25	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1293.8	1293.8	1293.8	1293.8	1293.8
2.5°	1290.9	1293.8	1282.5	1292.3	1295.2
5°	1288.1	1285.3	1268.5	1272.7	1271.3
7.5°	1279.7	1274.1	1246.0	1243.2	1237.6
10°	1268.5	1254.4	1215.1	1205.3	1196.8
12.5°	1253.0	1230.5	1182.8	1163.1	1153.3
15°	1231.9	1203.8	1144.8	1118.2	1105.5
17.5°	1206.7	1167.3	1105.5	1069.0	1054.9
20°	1177.2	1130.8	1059.2	1017.0	1000.2
22.5°	1144.8	1090.1	1010.0	965.0	946.8
25°	1106.9	1046.5	960.8	911.7	887.8
27.5°	1069.0	1001.6	908.9	854.1	828.8
30°	1031.1	953.8	852.7	793.7	767.0
32.5°	990.3	904.6	800.7	736.1	705.2
35°	942.6	855.5	744.5	677.1	643.4
37.5°	896.2	803.5	689.7	613.9	581.6
40°	852.7	754.3	634.9	552.1	518.3
42.5°	803.5	702.4	580.2	493.1	455.1
45°	754.3	649.0	524.0	429.8	391.9
47.5°	702.4	598.4	465.0	372.3	347.0
50°	656.0	546.4	413.0	328.7	311.8
52.5°	602.6	495.9	359.6	295.0	283.8
55°	549.2	441.1	307.6	265.5	257.1
57.5°	494.5	391.9	266.9	240.2	231.8
60°	436.9	341.3	234.6	213.5	209.3
62.5°	379.3	289.4	206.5	191.0	185.4
65°	323.1	240.2	181.2	167.2	164.4
67.5°	265.5	195.3	155.9	146.1	144.7
70°	212.1	158.7	132.0	126.4	123.6
72.5°	162.9	126.4	111.0	106.8	105.4
75°	115.2	101.1	91.3	88.5	87.1
77.5°	77.3	77.3	73.0	70.2	71.6
80°	53.4	56.2	54.8	54.8	54.8
82.5°	35.1	37.9	39.3	39.3	39.3
85°	19.7	22.5	23.9	23.9	25.3
87.5°	7.0	8.4	9.8	11.2	11.2
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	18.15	19.64	18.52	19.96	20.27	14.39	15.88	14.76	16.20	16.51
	3H	19.46	20.80	19.84	21.13	21.49	15.98	17.31	16.35	17.64	18.00
	4H	19.83	21.08	20.23	21.43	21.81	16.58	17.83	16.98	18.18	18.56
	6H	20.01	21.16	20.42	21.53	21.92	17.05	18.21	17.46	18.57	18.97
	8H	20.04	21.14	20.47	21.53	21.94	17.21	18.31	17.64	18.70	19.10
	12H	20.06	21.11	20.49	21.49	21.92	17.32	18.37	17.75	18.76	19.19
4H	2H	18.26	19.52	18.66	19.86	20.24	15.05	16.31	15.45	16.66	17.03
	3H	19.75	20.79	20.16	21.19	21.59	16.84	17.87	17.25	18.27	18.68
	4H	20.23	21.16	20.66	21.57	22.01	17.55	18.49	17.99	18.90	19.34
	6H	20.51	21.32	20.97	21.77	22.23	18.14	18.95	18.60	19.40	19.86
	8H	20.58	21.34	21.04	21.78	22.25	18.35	19.10	18.81	19.55	20.02
	12H	20.62	21.30	21.10	21.78	22.25	18.50	19.18	18.98	19.66	20.13
8H	4H	20.31	21.07	20.77	21.51	21.98	17.86	18.62	18.33	19.07	19.53
	6H	20.67	21.30	21.17	21.79	22.27	18.57	19.20	19.07	19.69	20.17
	8H	20.79	21.35	21.30	21.86	22.35	18.85	19.41	19.37	19.92	20.41
	12H	20.88	21.37	21.39	21.86	22.43	19.08	19.58	19.59	20.07	20.63
12H	4H	20.30	20.98	20.79	21.46	21.93	17.89	18.57	18.37	19.05	19.52
	6H	20.68	21.24	21.19	21.75	22.24	18.62	19.18	19.14	19.69	20.18
	8H	20.83	21.33	21.35	21.82	22.39	18.96	19.45	19.47	19.95	20.51