

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: P1062016

Luminaire Tested: S125RDR-H375D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062016
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-H375D835-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

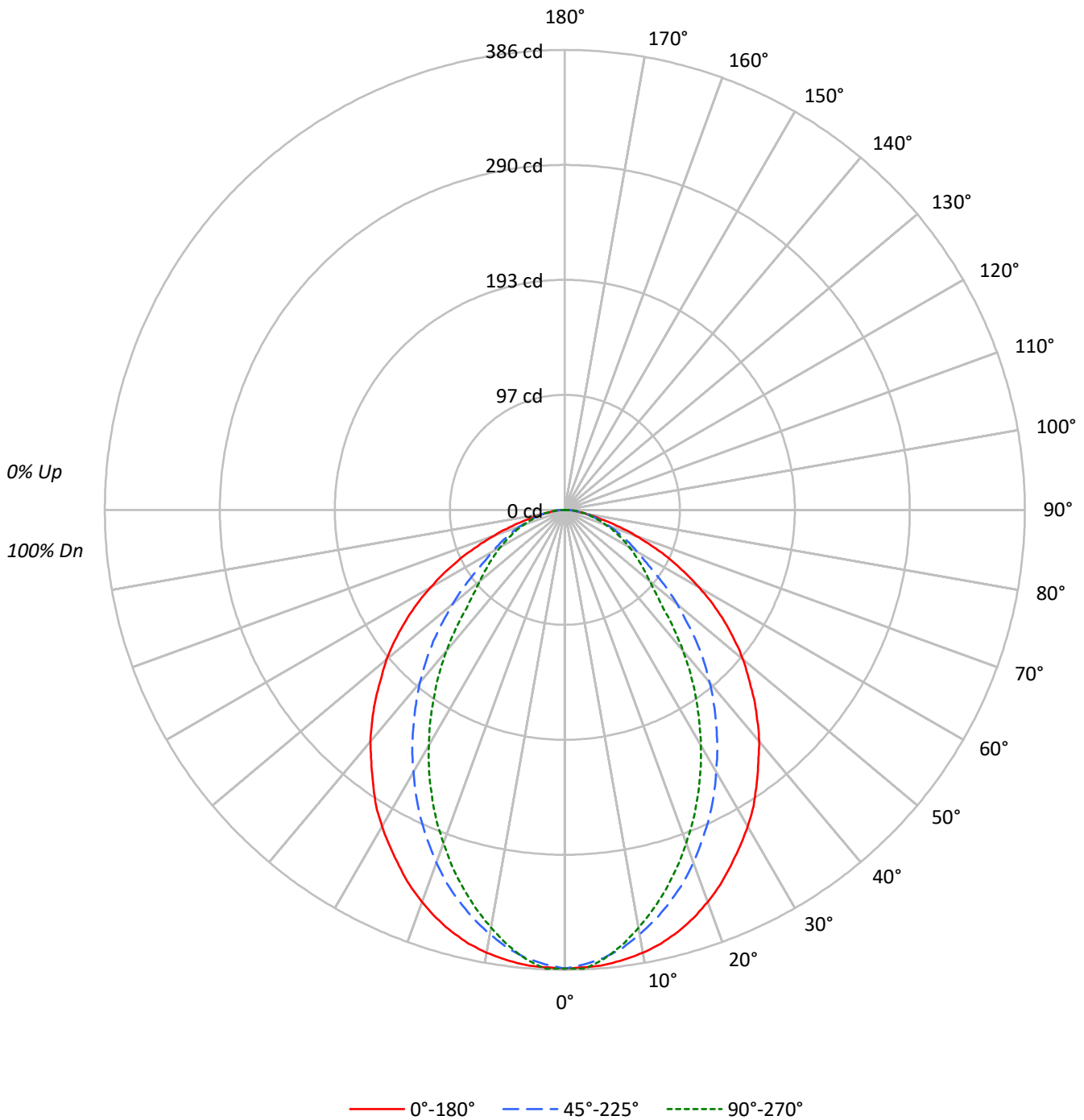
Lumens per Lamp: N/A
Luminaire Lumens: 729.4 lumens
Efficiency: N/A
Efficacy: 62.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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										
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	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	100	100	100	100	100														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87														
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	75	75	75														
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65	65	65	65	65	65	65														
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57	57	57	57	57	57	57														
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50	50	50	50	50	50	50														
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45	45	45	45	45	45	45														
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40	40	40	40	40	40	40														
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36	36	36	36	36	36	36														
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33	33	33	33	33	33	33														
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30	30	30	30	30	30	30														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2651	2651	2651
5°	2650	2609	2615
10°	2639	2528	2490
15°	2614	2429	2345
20°	2567	2310	2181
25°	2502	2173	2007
30°	2440	2018	1815
35°	2358	1863	1610
40°	2281	1699	1387
45°	2186	1518	1135
50°	2091	1316	994
55°	1963	1100	918
60°	1790	961	858
65°	1567	878	797
70°	1270	791	741
75°	912	724	689
80°	630	646	646
85°	466	561	592

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2186 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.8	4.9
10°-20°	96.8	13.3
20°-30°	133.8	18.3
30°-40°	142.6	19.5
40°-50°	125.2	17.2
50°-60°	95.0	13.0
60°-70°	61.7	8.5
70°-80°	30.5	4.2
80°-90°	8.0	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°	266.5	36.5
0°-40°	409.0	56.1
0°-60°	629.2	86.3
0°-90°	729.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	729.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	385	385	385	385	385	
5°	383	382	378	379	378	36
15°	367	358	341	333	329	103
25°	329	312	286	271	264	152
35°	280	255	222	202	192	176
45°	224	193	156	128	117	173
55°	164	131	92	79	76	146
65°	96	72	54	50	49	95
75°	34	30	27	26	26	38
85°	6	7	7	7	8	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	385.0	385.0	385.0	385.0	385.0
2.5°	384.2	385.0	381.7	384.6	385.5
5°	383.4	382.5	377.5	378.8	378.4
7.5°	380.9	379.2	370.8	370.0	368.3
10°	377.5	373.3	361.6	358.7	356.2
12.5°	372.9	366.2	352.0	346.2	343.2
15°	366.7	358.3	340.7	332.8	329.0
17.5°	359.1	347.4	329.0	318.2	314.0
20°	350.3	336.5	315.2	302.7	297.7
22.5°	340.7	324.4	300.6	287.2	281.8
25°	329.4	311.5	286.0	271.3	264.2
27.5°	318.2	298.1	270.5	254.2	246.7
30°	306.9	283.9	253.8	236.2	228.3
32.5°	294.7	269.2	238.3	219.1	209.9
35°	280.5	254.6	221.6	201.5	191.5
37.5°	266.7	239.1	205.3	182.7	173.1
40°	253.8	224.5	189.0	164.3	154.3
42.5°	239.1	209.0	172.7	146.7	135.5
45°	224.5	193.1	155.9	127.9	116.6
47.5°	209.0	178.1	138.4	110.8	103.3
50°	195.2	162.6	122.9	97.8	92.8
52.5°	179.4	147.6	107.0	87.8	84.5
55°	163.5	131.3	91.6	79.0	76.5
57.5°	147.2	116.6	79.4	71.5	69.0
60°	130.0	101.6	69.8	63.5	62.3
62.5°	112.9	86.1	61.5	56.9	55.2
65°	96.2	71.5	53.9	49.8	48.9
67.5°	79.0	58.1	46.4	43.5	43.1
70°	63.1	47.2	39.3	37.6	36.8
72.5°	48.5	37.6	33.0	31.8	31.4
75°	34.3	30.1	27.2	26.3	25.9
77.5°	23.0	23.0	21.7	20.9	21.3
80°	15.9	16.7	16.3	16.3	16.3
82.5°	10.5	11.3	11.7	11.7	11.7
85°	5.9	6.7	7.1	7.1	7.5
87.5°	2.1	2.5	2.9	3.3	3.3
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	13.94	15.43	14.30	15.74	16.06	10.18	11.68	10.55	11.99	12.30
	3H	15.25	16.59	15.63	16.91	17.28	11.77	13.10	12.14	13.43	13.79
	4H	15.62	16.87	16.02	17.22	17.60	12.37	13.62	12.77	13.97	14.35
	6H	15.80	16.95	16.21	17.32	17.71	12.84	14.00	13.25	14.36	14.76
	8H	15.83	16.93	16.26	17.32	17.72	13.00	14.10	13.43	14.49	14.89
	12H	15.85	16.90	16.28	17.28	17.71	13.11	14.16	13.54	14.55	14.98
4H	2H	14.05	15.30	14.45	15.65	16.03	10.84	12.10	11.24	12.45	12.82
	3H	15.54	16.58	15.95	16.98	17.38	12.63	13.66	13.04	14.06	14.47
	4H	16.01	16.95	16.45	17.36	17.80	13.34	14.28	13.78	14.69	15.13
	6H	16.30	17.11	16.76	17.55	18.01	13.93	14.74	14.39	15.19	15.65
	8H	16.37	17.13	16.83	17.57	18.04	14.14	14.89	14.60	15.34	15.81
	12H	16.41	17.09	16.89	17.56	18.04	14.29	14.97	14.77	15.44	15.92
8H	4H	16.10	16.85	16.56	17.30	17.77	13.65	14.41	14.12	14.86	15.32
	6H	16.46	17.08	16.96	17.58	18.05	14.36	14.98	14.86	15.48	15.95
	8H	16.58	17.14	17.09	17.65	18.14	14.64	15.20	15.15	15.71	16.20
	12H	16.66	17.16	17.18	17.65	18.22	14.87	15.36	15.38	15.86	16.42
12H	4H	16.09	16.77	16.57	17.25	17.72	13.68	14.35	14.16	14.83	15.31
	6H	16.46	17.02	16.98	17.53	18.02	14.41	14.97	14.93	15.48	15.97
	8H	16.62	17.12	17.13	17.61	18.18	14.75	15.24	15.26	15.73	16.30