

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: P1062070

Luminaire Tested: S125RDR-H375D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062070
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-H375D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

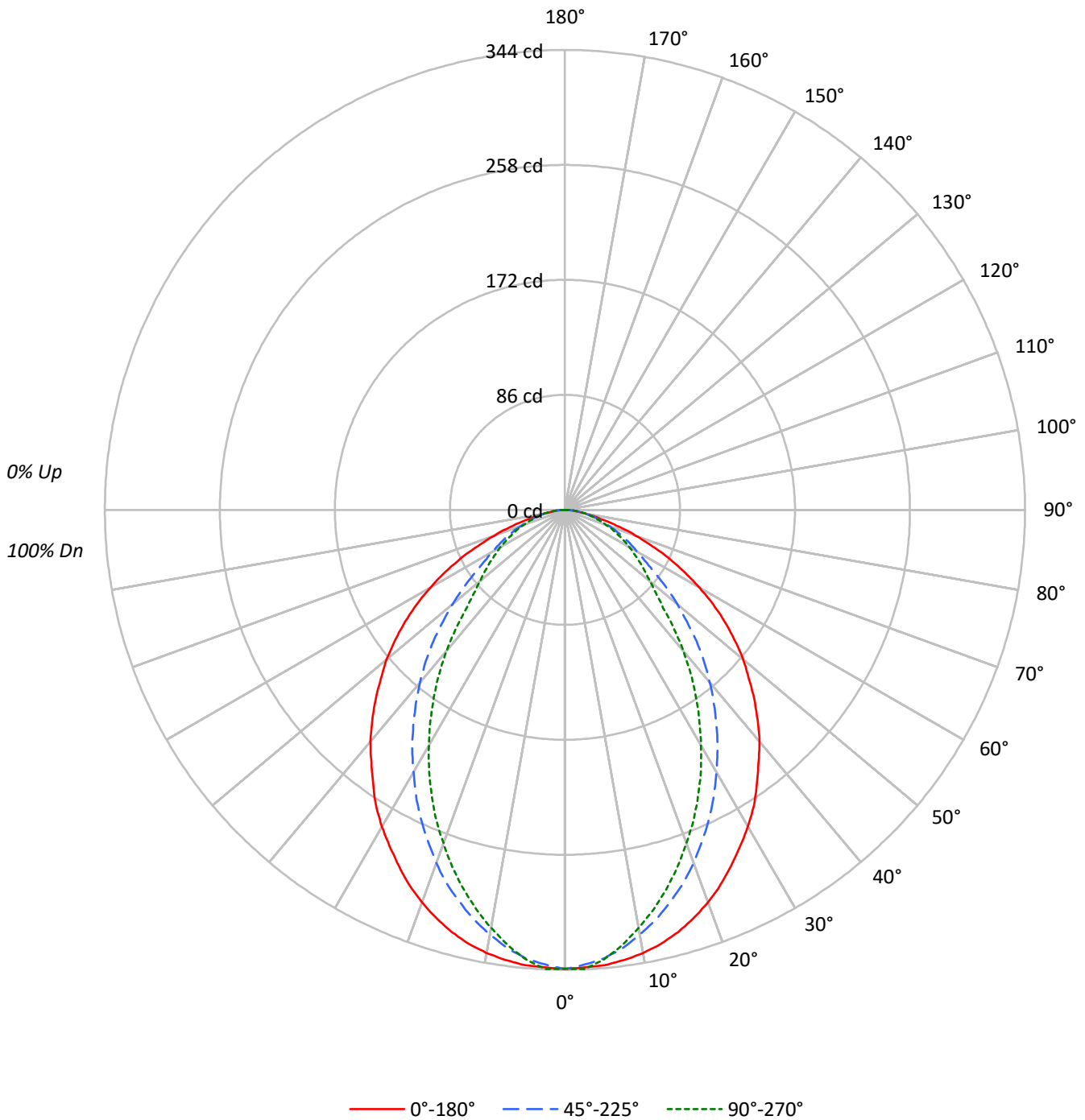
Lumens per Lamp: N/A
Luminaire Lumens: 650.4 lumens
Efficiency: N/A
Efficacy: 55.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1062070

CATALOG NUMBER: S125RDR-H375D940-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87													87															
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75													75															
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65													65															
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57													57															
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50													50															
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45													45															
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40													40															
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36													36															
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33													33															
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30													30															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2364	2364	2364
5°	2363	2326	2332
10°	2353	2255	2220
15°	2330	2166	2091
20°	2289	2060	1945
25°	2232	1937	1790
30°	2175	1799	1618
35°	2102	1661	1435
40°	2034	1514	1237
45°	1949	1354	1013
50°	1865	1174	887
55°	1750	980	819
60°	1596	858	764
65°	1396	784	710
70°	1133	705	660
75°	814	644	615
80°	563	575	575
85°	411	498	529

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1949 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.9	4.9
10°-20°	86.3	13.3
20°-30°	119.3	18.3
30°-40°	127.1	19.5
40°-50°	111.7	17.2
50°-60°	84.7	13.0
60°-70°	55.0	8.5
70°-80°	27.2	4.2
80°-90°	7.1	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°	237.6	36.5
0°-40°	364.7	56.1
0°-60°	561.1	86.3
0°-90°	650.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	650.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	343	343	343	343	343	
5°	342	341	337	338	337	32
15°	327	320	304	297	293	92
25°	294	278	255	242	236	135
35°	250	227	198	180	171	157
45°	200	172	139	114	104	154
55°	146	117	82	70	68	130
65°	86	64	48	44	44	85
75°	31	27	24	24	23	34
85°	5	6	6	6	7	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	343.3	343.3	343.3	343.3	343.3
2.5°	342.6	343.3	340.4	343.0	343.7
5°	341.9	341.1	336.6	337.8	337.4
7.5°	339.6	338.1	330.7	329.9	328.4
10°	336.6	332.9	322.5	319.9	317.6
12.5°	332.5	326.6	313.9	308.7	306.1
15°	326.9	319.5	303.8	296.7	293.4
17.5°	320.2	309.8	293.4	283.7	280.0
20°	312.4	300.1	281.1	269.9	265.4
22.5°	303.8	289.3	268.0	256.1	251.3
25°	293.8	277.7	255.0	241.9	235.6
27.5°	283.7	265.8	241.2	226.7	220.0
30°	273.6	253.1	226.3	210.6	203.5
32.5°	262.8	240.1	212.5	195.3	187.1
35°	250.1	227.0	197.6	179.7	170.7
37.5°	237.8	213.2	183.0	162.9	154.3
40°	226.3	200.2	168.5	146.5	137.6
42.5°	213.2	186.4	154.0	130.9	120.8
45°	200.2	172.2	139.1	114.1	104.0
47.5°	186.4	158.8	123.4	98.8	92.1
50°	174.1	145.0	109.6	87.2	82.8
52.5°	159.9	131.6	95.4	78.3	75.3
55°	145.8	117.1	81.6	70.5	68.2
57.5°	131.2	104.0	70.8	63.7	61.5
60°	115.9	90.6	62.3	56.7	55.5
62.5°	100.7	76.8	54.8	50.7	49.2
65°	85.7	63.7	48.1	44.4	43.6
67.5°	70.5	51.8	41.4	38.8	38.4
70°	56.3	42.1	35.0	33.6	32.8
72.5°	43.2	33.6	29.5	28.3	28.0
75°	30.6	26.8	24.2	23.5	23.1
77.5°	20.5	20.5	19.4	18.6	19.0
80°	14.2	14.9	14.5	14.5	14.5
82.5°	9.3	10.1	10.4	10.4	10.4
85°	5.2	6.0	6.3	6.3	6.7
87.5°	1.9	2.2	2.6	3.0	3.0
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	13.54	15.03	13.91	15.35	15.66	9.78	11.27	10.15	11.59	11.90
	3H	14.85	16.19	15.23	16.52	16.88	11.37	12.70	11.74	13.03	13.39
	4H	15.22	16.48	15.62	16.82	17.20	11.97	13.22	12.37	13.57	13.95
	6H	15.40	16.55	15.81	16.92	17.31	12.44	13.60	12.85	13.96	14.35
	8H	15.44	16.54	15.86	16.93	17.33	12.60	13.70	13.02	14.09	14.49
	12H	15.45	16.50	15.88	16.88	17.31	12.71	13.76	13.14	14.14	14.57
4H	2H	13.65	14.91	14.05	15.26	15.63	10.44	11.70	10.84	12.04	12.42
	3H	15.14	16.18	15.55	16.58	16.98	12.23	13.26	12.64	13.66	14.07
	4H	15.62	16.55	16.05	16.97	17.41	12.94	13.88	13.38	14.29	14.73
	6H	15.90	16.71	16.36	17.16	17.62	13.53	14.34	13.99	14.79	15.25
	8H	15.97	16.73	16.44	17.17	17.64	13.74	14.49	14.20	14.94	15.40
	12H	16.01	16.69	16.49	17.17	17.64	13.89	14.56	14.37	15.04	15.52
8H	4H	15.70	16.46	16.16	16.90	17.37	13.26	14.01	13.72	14.46	14.93
	6H	16.06	16.69	16.56	17.18	17.66	13.96	14.58	14.46	15.08	15.55
	8H	16.18	16.74	16.69	17.25	17.74	14.24	14.80	14.75	15.31	15.80
	12H	16.27	16.76	16.78	17.25	17.82	14.47	14.96	14.98	15.45	16.02
12H	4H	15.69	16.37	16.18	16.85	17.32	13.28	13.96	13.76	14.44	14.91
	6H	16.07	16.63	16.58	17.14	17.63	14.01	14.57	14.52	15.08	15.57
	8H	16.23	16.72	16.74	17.21	17.78	14.34	14.84	14.85	15.33	15.90