

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: P1062066

Luminaire Tested: S125RDR-H375D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062066
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-H375D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

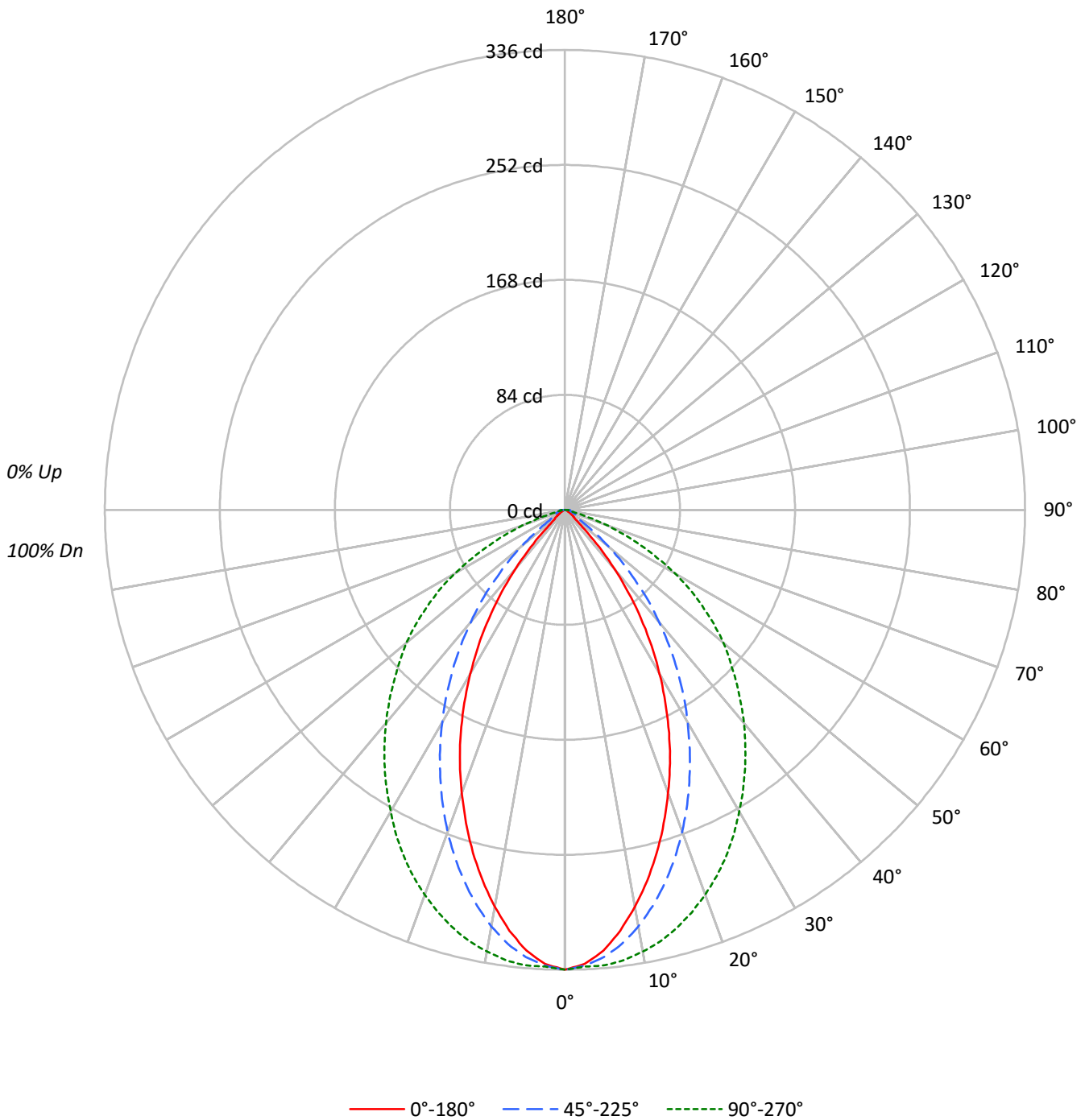
Lumens per Lamp: N/A
Luminaire Lumens: 434.5 lumens
Efficiency: N/A
Efficacy: 37.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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					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°	2313	2313	2313
5°	2234	2267	2308
10°	2058	2160	2291
15°	1849	2011	2253
20°	1613	1835	2193
25°	1367	1636	2118
30°	1098	1424	2023
35°	813	1201	1929
40°	503	959	1828
45°	197	701	1719
50°	92	440	1619
55°	67	188	1469
60°	47	134	1274
65°	31	140	991
70°	30	127	624
75°	40	130	200
80°	59	147	135
85°	87	292	205

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1719 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.8	7.1
10°-20°	79.8	18.4
20°-30°	101.6	23.4
30°-40°	94.6	21.8
40°-50°	65.1	15.0
50°-60°	36.9	8.5
60°-70°	17.4	4.0
70°-80°	5.4	1.3
80°-90°	2.8	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°	212.2	48.8
0°-40°	306.8	70.6
0°-60°	408.8	94.1
0°-90°	434.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	434.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	336	336	336	336	336	
5°	323	328	328	331	334	30
15°	259	268	282	303	316	72
25°	180	191	215	252	279	82
35°	97	110	143	192	230	60
45°	20	32	72	130	176	19
55°	6	6	16	75	122	5
65°	2	2	9	27	61	2
75°	2	3	5	5	8	2
85°	1	3	4	3	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	335.9	335.9	335.9	335.9	335.9
2.5°	332.1	335.5	333.3	333.6	334.0
5°	323.2	327.7	328.0	331.0	334.0
7.5°	310.1	315.7	319.8	326.9	331.8
10°	294.4	301.2	309.0	320.6	327.7
12.5°	277.6	285.5	296.3	312.7	322.8
15°	259.4	267.9	282.1	303.4	316.1
17.5°	240.0	249.7	266.8	292.2	308.2
20°	220.2	230.6	250.4	279.5	299.3
22.5°	200.4	211.2	233.2	265.7	289.6
25°	179.9	191.4	215.3	251.5	278.8
27.5°	159.0	170.9	197.4	237.0	267.2
30°	138.1	150.8	179.1	222.0	254.5
32.5°	117.6	130.2	161.2	207.1	242.2
35°	96.7	110.1	142.9	191.8	229.5
37.5°	75.8	90.3	125.0	176.1	216.4
40°	56.0	69.8	106.7	160.8	203.4
42.5°	37.3	50.8	90.3	145.5	189.9
45°	20.2	32.1	72.0	130.2	176.5
47.5°	10.8	17.2	56.4	115.3	163.5
50°	8.6	9.7	41.1	101.5	151.1
52.5°	7.1	7.8	26.9	88.4	137.0
55°	5.6	6.3	15.7	75.0	122.4
57.5°	4.5	5.2	10.1	62.3	108.2
60°	3.4	4.1	9.7	50.0	92.5
62.5°	2.6	3.0	9.0	38.4	76.1
65°	1.9	2.2	8.6	26.9	60.8
67.5°	1.5	1.9	7.8	17.2	45.5
70°	1.5	1.5	6.3	11.2	31.0
72.5°	1.5	2.6	5.6	7.5	18.7
75°	1.5	3.4	4.9	5.2	7.5
77.5°	1.5	3.7	4.1	4.1	4.1
80°	1.5	3.4	3.7	3.7	3.4
82.5°	1.5	3.0	3.4	3.7	3.0
85°	1.1	3.0	3.7	3.4	2.6
87.5°	1.1	3.0	3.4	3.0	1.9
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	0.00	0.00	0.00	0.00	0.00	12.16	13.45	12.52	13.76	14.07
	3H	0.00	0.00	0.00	0.00	0.00	12.88	14.02	13.26	14.35	14.71
	4H	0.00	0.00	0.00	0.00	0.00	12.90	13.96	13.30	14.31	14.70
	6H	0.00	0.00	0.00	0.00	0.00	12.85	13.83	13.27	14.20	14.59
	8H	0.00	0.00	0.00	0.00	0.00	12.83	13.75	13.26	14.14	14.55
	12H	0.00	0.00	0.00	0.00	0.00	12.81	13.69	13.24	14.08	14.51
4H	2H	0.00	0.00	0.00	0.00	0.00	11.95	13.01	12.35	13.36	13.74
	3H	0.00	0.00	0.00	0.00	0.00	12.70	13.57	13.12	13.98	14.38
	4H	0.00	0.00	0.00	0.00	0.14	12.73	13.51	13.17	13.93	14.37
	6H	0.00	0.45	0.25	0.90	1.37	12.71	13.38	13.18	13.83	14.29
	8H	0.37	0.99	0.84	1.44	1.91	12.70	13.32	13.17	13.77	14.24
	12H	0.93	1.48	1.41	1.96	2.43	12.70	13.25	13.19	13.74	14.21
8H	4H	0.00	0.54	0.39	0.99	1.46	12.62	13.24	13.09	13.69	14.16
	6H	1.48	1.99	1.98	2.49	2.97	12.61	13.11	13.11	13.61	14.09
	8H	2.28	2.74	2.80	3.25	3.75	12.62	13.07	13.14	13.59	14.08
	12H	3.12	3.52	3.63	4.01	4.59	12.68	13.08	13.19	13.58	14.15
12H	4H	0.13	0.68	0.62	1.17	1.64	12.57	13.12	13.06	13.61	14.08
	6H	1.85	2.31	2.37	2.82	3.32	12.56	13.02	13.08	13.53	14.02
	8H	2.85	3.25	3.36	3.75	4.32	12.61	13.01	13.12	13.51	14.08