

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1056564

Luminaire Tested: S125R3DR-H375D930-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056564
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-H375D930-X4F0-XX-UDD-F-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

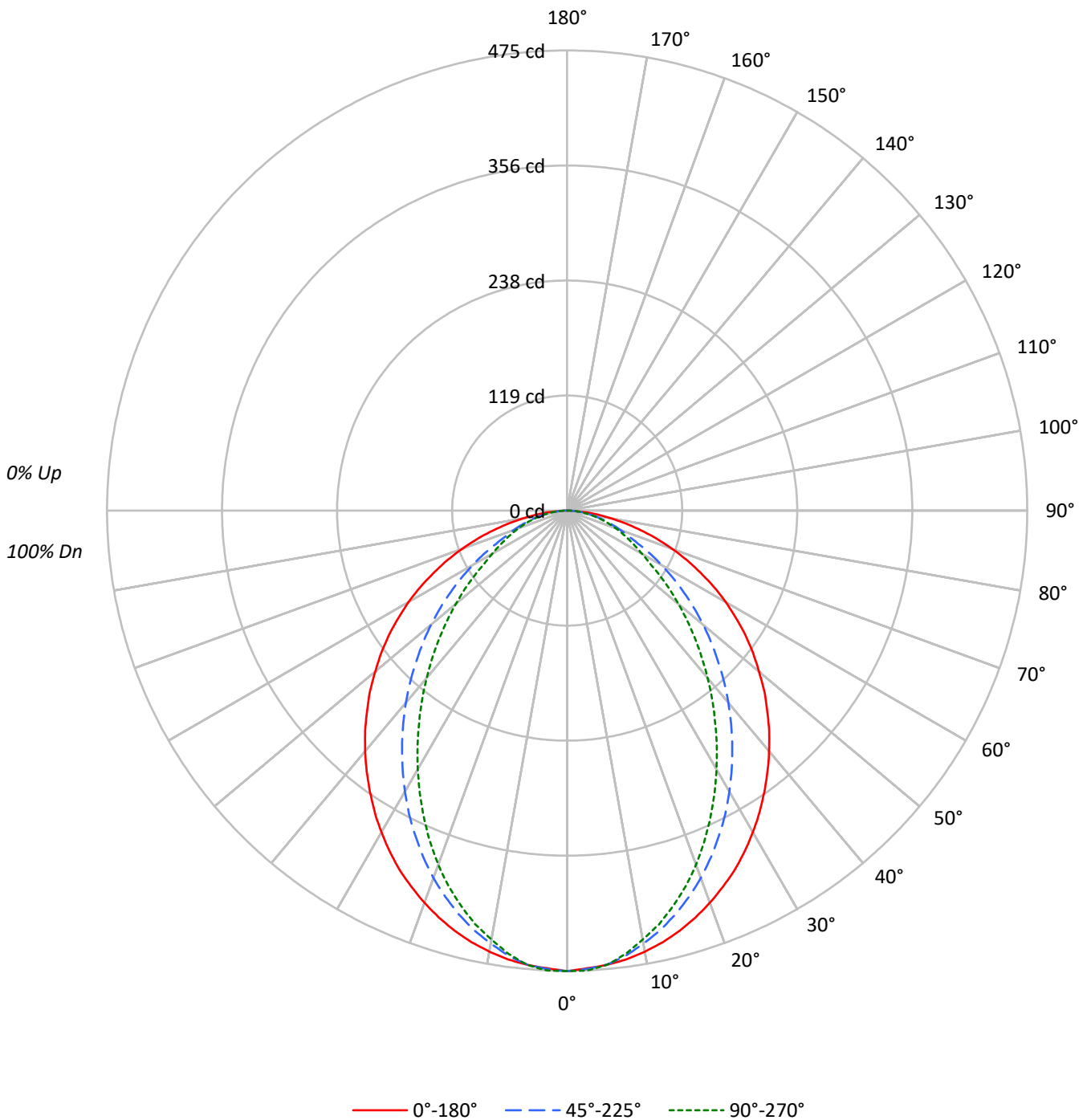
Lumens per Lamp: N/A
Luminaire Lumens: 1007.6 lumens
Efficiency: N/A
Efficacy: 86.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3361	3361	3361
5°	3341	3339	3341
10°	3319	3258	3227
15°	3285	3158	3094
20°	3241	3036	2926
25°	3192	2891	2728
30°	3130	2734	2517
35°	3061	2563	2297
40°	2993	2388	2081
45°	2919	2204	1866
50°	2842	2017	1651
55°	2771	1811	1436
60°	2672	1592	1261
65°	2541	1350	1173
70°	2385	1207	1098
75°	2155	1112	1035
80°	1873	1010	965
85°	1468	892	892

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2919 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.5	4.4
10°-20°	122.1	12.1
20°-30°	172.5	17.1
30°-40°	189.9	18.8
40°-50°	177.2	17.6
50°-60°	141.4	14.0
60°-70°	95.2	9.4
70°-80°	50.7	5.0
80°-90°	14.1	1.4
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°	339.1	33.7
0°-40°	529.1	52.5
0°-60°	847.7	84.1
0°-90°	1007.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1007.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	471	475	470	469	471	45
15°	449	446	432	424	423	127
25°	409	397	371	354	350	188
35°	355	334	297	274	266	222
45°	292	264	220	194	187	225
55°	225	191	147	124	116	201
65°	152	119	81	72	70	151
75°	79	52	41	38	38	84
85°	18	12	11	11	11	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	475.4	475.4	475.4	475.4	475.4
2.5°	472.9	476.8	473.6	474.4	475.1
5°	470.8	474.7	470.5	469.0	470.8
7.5°	467.3	470.5	463.4	460.2	461.6
10°	462.3	464.4	453.8	449.6	449.6
12.5°	456.3	456.3	443.6	437.5	437.5
15°	448.9	446.4	431.5	424.1	422.7
17.5°	440.4	435.8	418.1	408.5	406.7
20°	430.8	423.4	403.6	391.2	389.0
22.5°	420.2	410.6	387.6	372.4	369.9
25°	409.2	396.8	370.6	354.4	349.7
27.5°	396.8	382.0	353.3	334.9	329.2
30°	383.4	366.4	334.9	314.3	308.3
32.5°	369.6	350.5	316.1	294.2	287.4
35°	354.7	333.8	297.0	273.6	266.2
37.5°	339.8	317.2	278.2	253.8	246.0
40°	324.3	299.5	258.8	233.6	225.5
42.5°	308.7	282.1	239.7	214.2	205.7
45°	292.0	264.4	220.5	193.6	186.6
47.5°	276.1	246.4	201.8	175.6	167.8
50°	258.4	227.6	183.4	157.2	150.1
52.5°	242.1	209.2	165.0	140.5	133.1
55°	224.8	190.8	146.9	123.5	116.5
57.5°	206.7	172.4	129.6	107.6	100.9
60°	189.0	154.0	112.6	92.4	89.2
62.5°	171.0	136.6	96.6	81.1	78.9
65°	151.9	118.6	80.7	71.5	70.1
67.5°	133.8	101.2	68.0	62.7	61.2
70°	115.4	83.9	58.4	53.8	53.1
72.5°	97.3	67.3	49.2	46.0	45.3
75°	78.9	52.4	40.7	38.2	37.9
77.5°	61.9	39.3	32.2	31.2	30.4
80°	46.0	29.4	24.8	24.1	23.7
82.5°	31.5	20.2	17.7	17.7	17.0
85°	18.1	12.4	11.0	11.3	11.0
87.5°	6.7	5.3	5.0	5.3	5.3
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	15.50	17.04	15.86	17.35	17.67	11.88	13.42	12.25	13.73	14.05
	3H	17.28	18.67	17.66	19.00	19.36	13.36	14.74	13.74	15.07	15.43
	4H	17.94	19.24	18.34	19.59	19.96	13.95	15.25	14.35	15.60	15.97
	6H	18.41	19.61	18.83	19.98	20.37	14.41	15.61	14.82	15.98	16.37
	8H	18.57	19.71	18.99	20.10	20.50	14.57	15.71	15.00	16.10	16.50
	12H	18.66	19.76	19.09	20.14	20.57	14.69	15.78	15.12	16.16	16.59
4H	2H	15.63	16.93	16.03	17.28	17.66	12.56	13.86	12.96	14.21	14.58
	3H	17.60	18.69	18.01	19.08	19.49	14.24	15.32	14.65	15.72	16.12
	4H	18.35	19.32	18.78	19.74	20.18	14.94	15.91	15.37	16.33	16.77
	6H	18.94	19.79	19.40	20.23	20.69	15.52	16.37	15.98	16.81	17.27
	8H	19.15	19.94	19.61	20.39	20.85	15.73	16.53	16.20	16.97	17.44
	12H	19.30	20.01	19.78	20.48	20.96	15.89	16.60	16.38	17.08	17.55
8H	4H	18.41	19.21	18.88	19.65	20.12	15.30	16.10	15.77	16.54	17.01
	6H	19.07	19.73	19.57	20.22	20.70	16.01	16.66	16.50	17.15	17.63
	8H	19.33	19.92	19.84	20.42	20.91	16.29	16.88	16.80	17.39	17.88
	12H	19.53	20.06	20.04	20.55	21.11	16.53	17.05	17.04	17.54	18.11
12H	4H	18.41	19.11	18.89	19.59	20.06	15.35	16.06	15.83	16.54	17.01
	6H	19.07	19.66	19.58	20.17	20.65	16.08	16.67	16.59	17.18	17.66
	8H	19.36	19.88	19.87	20.37	20.94	16.42	16.94	16.93	17.43	18.00