

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: P243655

Luminaire Tested: S125DRP-H375D940-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2024  
Report Number: P243655  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-51)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DRP-H375D940-X4F0-XX-UDD-F-W  
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

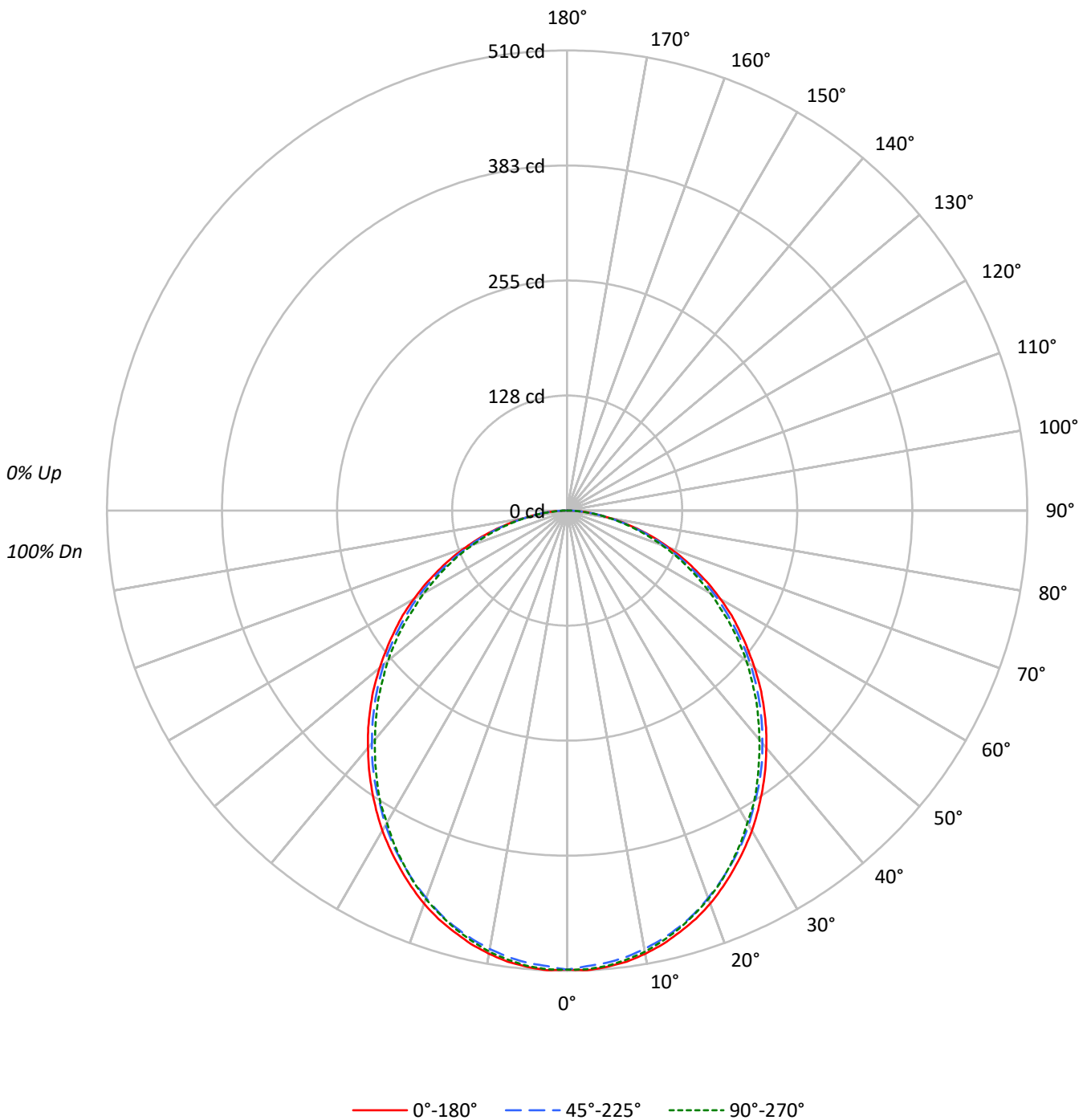
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1313.3 lumens  
Efficiency: N/A  
Efficacy: 117.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.2  
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	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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84													84															
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70													70															
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60													60															
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51													51															
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44													44															
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39													39															
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35													35															
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31													31															
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28													28															
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25													25															

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3616	3616	3616
5°	3622	3590	3614
10°	3599	3562	3583
15°	3557	3519	3530
20°	3506	3456	3464
25°	3434	3384	3378
30°	3361	3302	3278
35°	3274	3216	3187
40°	3186	3124	3076
45°	3099	3031	2975
50°	2996	2935	2868
55°	2896	2817	2743
60°	2786	2706	2611
65°	2655	2561	2474
70°	2490	2396	2319
75°	2296	2224	2123
80°	2001	1985	1940
85°	1737	1737	1647

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3099 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.0	3.7
10°-20°	135.5	10.3
20°-30°	199.7	15.2
30°-40°	232.5	17.7
40°-50°	233.0	17.7
50°-60°	203.7	15.5
60°-70°	151.2	11.5
70°-80°	85.7	6.5
80°-90°	24.0	1.8
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°	383.1	29.2
0°-40°	615.7	46.9
0°-60°	1052.4	80.1
0°-90°	1313.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1313.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	509	509	509	509	509	
5°	508	507	503	507	507	48
15°	483	483	478	481	480	136
25°	438	436	432	433	431	202
35°	377	375	371	368	367	236
45°	308	308	302	297	296	238
55°	234	233	227	222	221	209
65°	158	157	152	149	147	157
75°	84	82	81	80	77	89
85°	21	21	21	20	20	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	508.8	508.8	508.8	508.8	508.8
2.5°	509.9	509.2	505.4	509.2	508.8
5°	507.7	506.9	503.2	506.9	506.6
7.5°	504.3	503.2	499.1	502.8	502.1
10°	498.7	498.0	493.5	496.5	496.5
12.5°	492.0	490.9	486.4	489.0	488.6
15°	483.4	482.7	478.2	480.8	479.7
17.5°	474.5	472.6	468.5	470.7	469.2
20°	463.6	462.1	456.9	458.8	458.0
22.5°	451.3	449.5	444.6	445.7	445.3
25°	437.9	436.4	431.5	432.7	430.8
27.5°	424.1	422.2	417.7	417.7	415.9
30°	409.5	407.6	402.4	402.4	399.4
32.5°	393.8	392.3	386.0	385.6	384.9
35°	377.4	375.2	370.7	368.4	367.3
37.5°	361.0	359.1	354.3	351.3	349.4
40°	343.4	342.3	336.7	334.1	331.5
42.5°	326.3	325.1	319.2	314.7	313.6
45°	308.3	307.6	301.6	297.1	296.0
47.5°	290.4	289.7	283.7	278.9	277.0
50°	271.0	271.0	265.4	260.6	259.4
52.5°	252.3	252.0	246.4	241.5	240.4
55°	233.7	233.3	227.3	222.5	221.4
57.5°	216.1	213.9	208.7	204.9	201.2
60°	196.0	194.9	190.4	185.5	183.7
62.5°	177.3	175.8	171.3	167.2	164.6
65°	157.9	156.8	152.3	148.9	147.1
67.5°	139.6	138.1	133.6	131.0	129.5
70°	119.8	118.7	115.3	112.0	111.6
72.5°	102.3	100.8	98.9	95.9	94.4
75°	83.6	82.1	81.0	79.5	77.3
77.5°	65.7	65.0	64.2	63.1	62.0
80°	48.9	48.9	48.5	47.8	47.4
82.5°	34.7	35.1	34.0	33.2	33.2
85°	21.3	21.3	21.3	20.5	20.2
87.5°	10.5	9.3	9.3	8.6	8.6
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	15.77	17.39	16.14	17.70	18.02	15.44	17.05	15.80	17.37	17.68
	3H	17.53	18.99	17.91	19.32	19.68	17.15	18.61	17.53	18.94	19.30
	4H	18.18	19.55	18.58	19.90	20.28	17.79	19.16	18.19	19.51	19.88
	6H	18.64	19.92	19.05	20.28	20.67	18.26	19.54	18.67	19.90	20.29
	8H	18.79	20.01	19.22	20.40	20.80	18.42	19.63	18.84	20.02	20.42
	12H	18.89	20.06	19.32	20.44	20.87	18.52	19.68	18.95	20.06	20.49
4H	2H	16.35	17.72	16.74	18.07	18.44	16.08	17.45	16.48	17.80	18.18
	3H	18.33	19.48	18.74	19.88	20.28	18.01	19.16	18.42	19.56	19.96
	4H	19.10	20.14	19.54	20.56	20.99	18.78	19.82	19.21	20.23	20.67
	6H	19.69	20.60	20.15	21.04	21.50	19.38	20.29	19.83	20.73	21.18
	8H	19.89	20.74	20.35	21.18	21.65	19.58	20.43	20.04	20.87	21.34
	12H	20.04	20.80	20.52	21.28	21.75	19.72	20.49	20.20	20.96	21.43
8H	4H	19.39	20.24	19.85	20.68	21.14	19.10	19.95	19.56	20.39	20.86
	6H	20.10	20.80	20.59	21.29	21.77	19.82	20.53	20.31	21.01	21.49
	8H	20.37	21.00	20.88	21.51	21.99	20.09	20.72	20.60	21.23	21.72
	12H	20.59	21.15	21.10	21.64	22.20	20.31	20.87	20.81	21.36	21.92
12H	4H	19.41	20.18	19.89	20.65	21.12	19.13	19.90	19.61	20.37	20.84
	6H	20.14	20.78	20.65	21.29	21.77	19.88	20.51	20.39	21.02	21.51
	8H	20.47	21.04	20.98	21.53	22.09	20.21	20.77	20.71	21.26	21.82