

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: P243636

Luminaire Tested: S125DRP-H375D835-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2024  
Report Number: P243636  
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-H375D835-X4F0-XX-UDD-F-W  
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

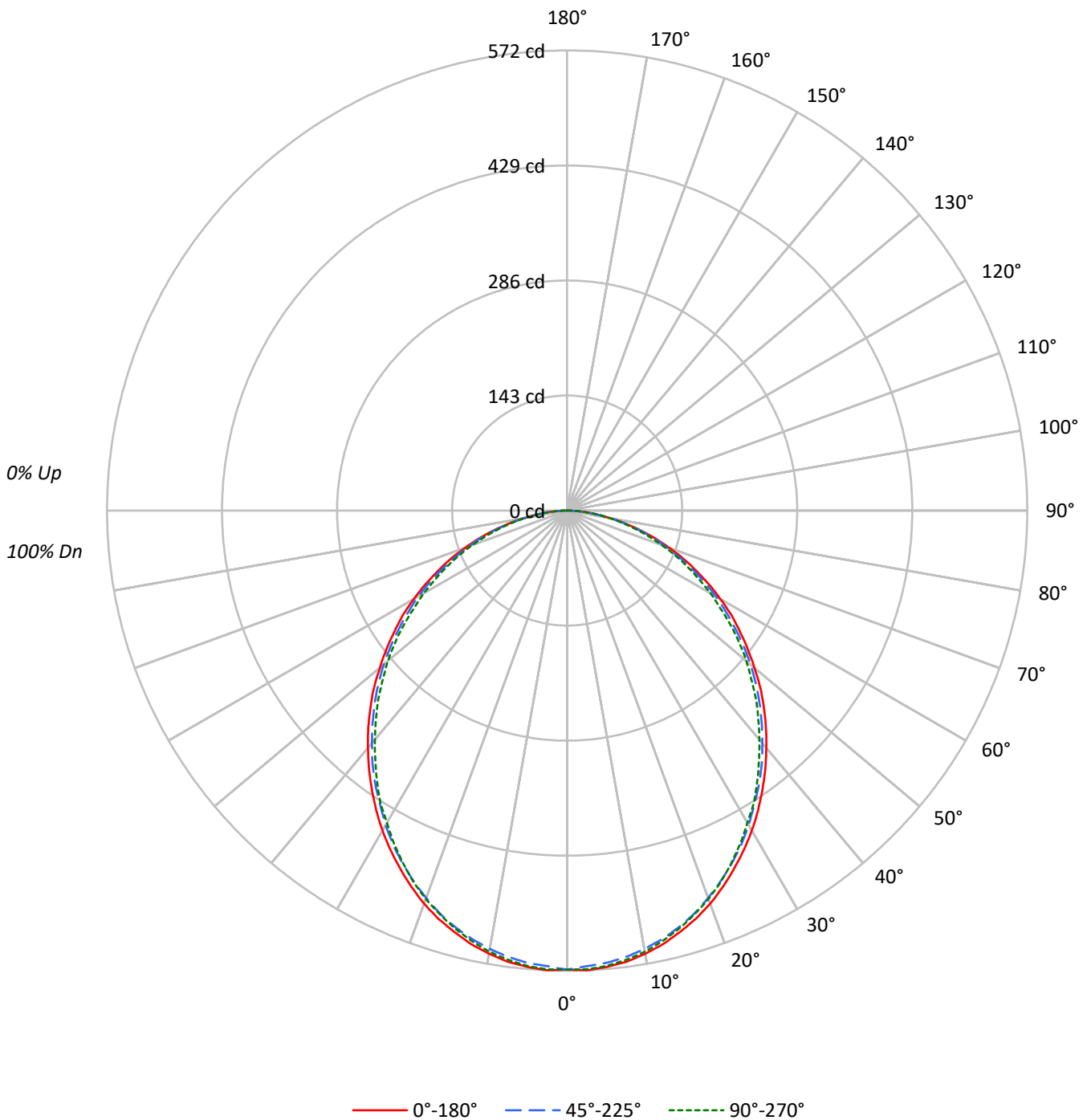
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1472.9 lumens  
Efficiency: N/A  
Efficacy: 131.5 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 (A<sub>in</sub>): 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°	4055	4055	4055
5°	4062	4026	4053
10°	4036	3994	4018
15°	3989	3946	3958
20°	3932	3876	3885
25°	3851	3795	3789
30°	3769	3704	3676
35°	3672	3607	3574
40°	3573	3503	3449
45°	3476	3400	3337
50°	3360	3291	3216
55°	3248	3159	3076
60°	3124	3035	2928
65°	2978	2872	2773
70°	2793	2689	2602
75°	2576	2493	2381
80°	2243	2227	2177
85°	1949	1949	1843

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3476 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.8	3.7
10°-20°	151.9	10.3
20°-30°	223.9	15.2
30°-40°	260.8	17.7
40°-50°	261.3	17.7
50°-60°	228.4	15.5
60°-70°	169.5	11.5
70°-80°	96.1	6.5
80°-90°	27.0	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°	429.7	29.2
0°-40°	690.4	46.9
0°-60°	1180.2	80.1
0°-90°	1472.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1472.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	571	571	571	571	571	
5°	569	568	564	568	568	54
15°	542	541	536	539	538	153
25°	491	489	484	485	483	226
35°	423	421	416	413	412	265
45°	346	345	338	333	332	267
55°	262	262	255	250	248	235
65°	177	176	171	167	165	176
75°	94	92	91	89	87	99
85°	24	24	24	23	23	28
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	570.6	570.6	570.6	570.6	570.6
2.5°	571.9	571.0	566.8	571.0	570.6
5°	569.3	568.5	564.3	568.5	568.1
7.5°	565.6	564.3	559.7	563.9	563.1
10°	559.3	558.5	553.4	556.8	556.8
12.5°	551.8	550.5	545.5	548.4	548.0
15°	542.1	541.3	536.3	539.2	537.9
17.5°	532.1	530.0	525.4	527.9	526.2
20°	519.9	518.3	512.4	514.5	513.7
22.5°	506.1	504.0	498.6	499.8	499.4
25°	491.1	489.4	483.9	485.2	483.1
27.5°	475.6	473.5	468.4	468.4	466.4
30°	459.2	457.1	451.3	451.3	447.9
32.5°	441.7	440.0	432.9	432.4	431.6
35°	423.2	420.7	415.7	413.2	411.9
37.5°	404.8	402.7	397.3	393.9	391.8
40°	385.1	383.9	377.6	374.7	371.7
42.5°	365.9	364.6	357.9	352.9	351.7
45°	345.8	345.0	338.3	333.2	332.0
47.5°	325.7	324.9	318.2	312.7	310.6
50°	303.9	303.9	297.6	292.2	290.9
52.5°	283.0	282.6	276.3	270.9	269.6
55°	262.1	261.6	254.9	249.5	248.2
57.5°	242.4	239.9	234.0	229.8	225.6
60°	219.8	218.5	213.5	208.1	206.0
62.5°	198.9	197.2	192.2	187.5	184.6
65°	177.1	175.8	170.8	167.0	164.9
67.5°	156.6	154.9	149.9	146.9	145.3
70°	134.4	133.1	129.4	125.6	125.2
72.5°	114.7	113.0	110.9	107.6	105.9
75°	93.8	92.1	90.8	89.2	86.7
77.5°	73.7	72.8	72.0	70.7	69.5
80°	54.8	54.8	54.4	53.6	53.2
82.5°	38.9	39.4	38.1	37.3	37.3
85°	23.9	23.9	23.9	23.0	22.6
87.5°	11.7	10.5	10.5	9.6	9.6
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	16.17	17.79	16.54	18.10	18.42	15.84	17.45	16.20	17.76	18.08
	3H	17.93	19.39	18.31	19.72	20.08	17.55	19.01	17.93	19.33	19.69
	4H	18.58	19.95	18.98	20.30	20.68	18.19	19.56	18.59	19.91	20.28
	6H	19.04	20.31	19.45	20.68	21.07	18.66	19.93	19.07	20.30	20.69
	8H	19.19	20.41	19.62	20.79	21.19	18.82	20.03	19.24	20.42	20.82
	12H	19.29	20.46	19.72	20.84	21.27	18.92	20.08	19.35	20.46	20.89
4H	2H	16.74	18.12	17.14	18.47	18.84	16.48	17.85	16.88	18.20	18.57
	3H	18.73	19.88	19.14	20.27	20.67	18.41	19.56	18.82	19.96	20.36
	4H	19.50	20.54	19.93	20.96	21.39	19.18	20.22	19.61	20.63	21.07
	6H	20.09	21.00	20.55	21.44	21.90	19.78	20.69	20.23	21.13	21.58
	8H	20.29	21.14	20.75	21.58	22.05	19.98	20.83	20.44	21.27	21.74
	12H	20.44	21.20	20.92	21.68	22.14	20.12	20.89	20.60	21.36	21.83
8H	4H	19.78	20.64	20.25	21.08	21.54	19.50	20.35	19.96	20.79	21.25
	6H	20.49	21.20	20.99	21.69	22.16	20.22	20.93	20.71	21.41	21.89
	8H	20.77	21.40	21.28	21.91	22.39	20.49	21.12	21.00	21.63	22.12
	12H	20.99	21.55	21.49	22.04	22.60	20.71	21.27	21.21	21.76	22.32
12H	4H	19.81	20.58	20.29	21.05	21.52	19.53	20.30	20.01	20.77	21.24
	6H	20.54	21.18	21.05	21.68	22.17	20.28	20.91	20.79	21.42	21.90
	8H	20.87	21.43	21.38	21.92	22.48	20.61	21.17	21.11	21.66	22.22