

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: P242888

Luminaire Tested: S125RDRP-S375D930-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2024  
Report Number: P242888  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S375D930-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

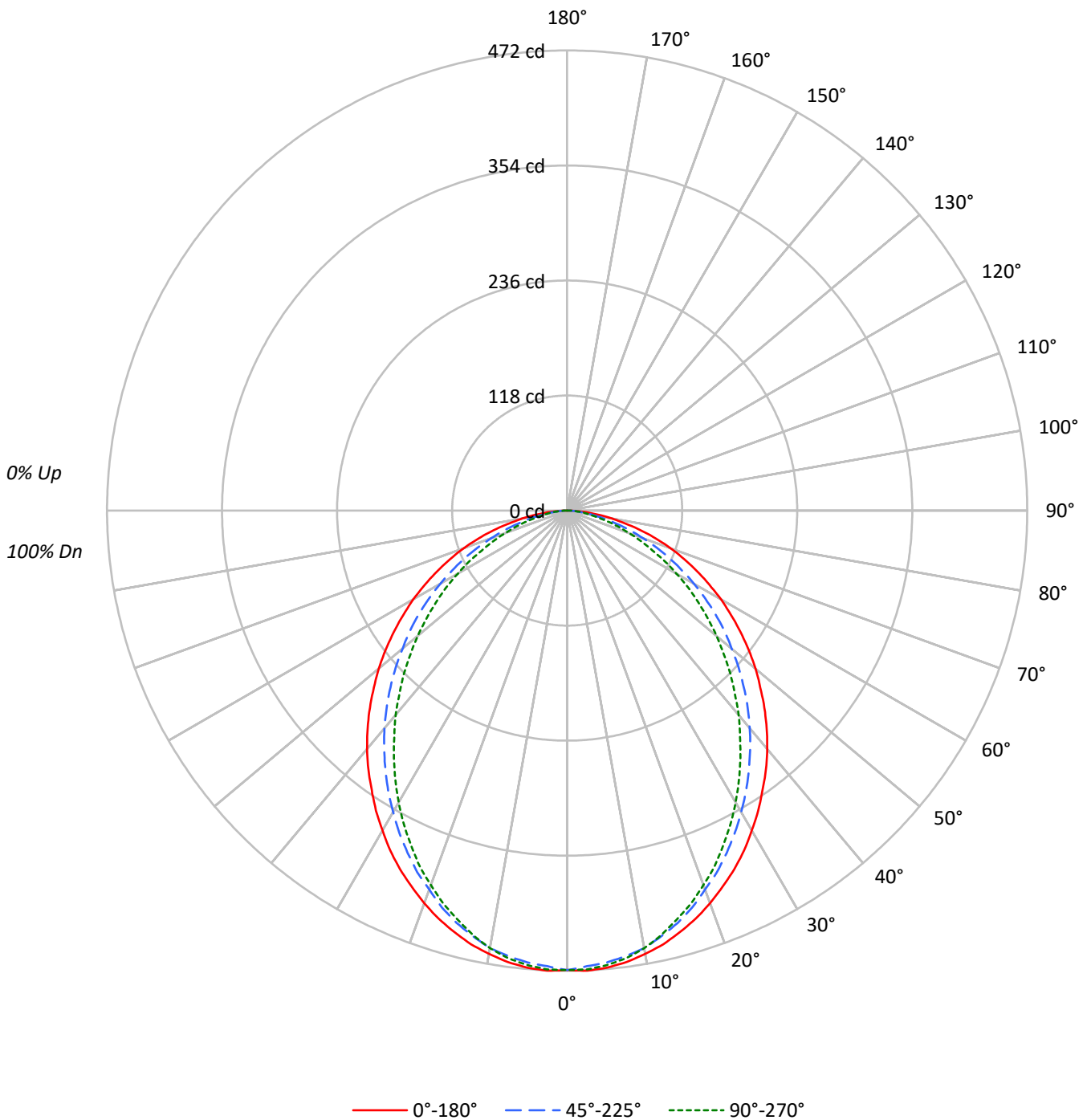
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1113.6 lumens  
Efficiency: N/A  
Efficacy: 96.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.6  
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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	98	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	29
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27

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

	0°	45°	90°
0°	3350	3350	3350
5°	3357	3320	3340
10°	3332	3289	3289
15°	3293	3222	3196
20°	3242	3128	3091
25°	3182	3037	2971
30°	3109	2930	2837
35°	3033	2820	2687
40°	2962	2705	2539
45°	2877	2576	2379
50°	2791	2437	2213
55°	2690	2302	2033
60°	2591	2141	1842
65°	2472	1951	1623
70°	2338	1716	1399
75°	2150	1447	1164
80°	1895	1138	978
85°	1598	930	873

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2877 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.4	4.0
10°-20°	124.0	11.1
20°-30°	179.7	16.1
30°-40°	204.8	18.4
40°-50°	199.6	17.9
50°-60°	168.0	15.1
60°-70°	117.7	10.6
70°-80°	60.4	5.4
80°-90°	15.0	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°	348.1	31.3
0°-40°	552.9	49.6
0°-60°	920.4	82.7
0°-90°	1113.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1113.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	471	471	471	471	471	
5°	471	469	465	469	468	45
15°	448	445	438	438	434	126
25°	406	400	387	383	379	187
35°	350	341	325	315	310	219
45°	286	276	256	242	237	221
55°	217	206	186	170	164	194
65°	147	135	116	102	96	146
75°	78	68	53	45	42	83
85°	20	13	11	11	11	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	471.3	471.3	471.3	471.3	471.3
2.5°	472.4	471.3	467.8	471.3	471.0
5°	470.6	469.2	465.3	468.8	468.1
7.5°	467.0	465.6	461.0	463.8	463.1
10°	461.7	460.6	455.7	456.7	455.7
12.5°	455.7	454.2	447.1	447.8	446.0
15°	447.5	445.3	437.9	437.5	434.3
17.5°	438.9	435.7	426.8	425.0	422.5
20°	428.6	425.0	413.6	411.9	408.7
22.5°	417.2	413.6	401.5	397.6	395.1
25°	405.8	400.5	387.3	382.7	378.8
27.5°	393.0	386.6	372.7	366.7	362.7
30°	378.8	372.0	357.0	348.9	345.7
32.5°	364.9	356.7	341.4	332.1	327.9
35°	349.6	341.0	325.0	314.7	309.7
37.5°	335.0	324.7	308.3	296.2	291.2
40°	319.3	308.6	291.5	278.0	273.7
42.5°	302.9	291.9	274.1	261.3	254.5
45°	286.2	275.9	256.3	242.1	236.7
47.5°	268.8	258.1	238.5	223.9	217.9
50°	252.4	240.6	220.4	205.4	200.1
52.5°	234.6	222.5	203.6	187.2	181.9
55°	217.1	205.8	185.8	169.8	164.1
57.5°	199.3	187.2	168.0	152.4	147.4
60°	182.3	169.8	150.6	134.9	129.6
62.5°	164.1	152.4	132.8	118.5	113.2
65°	147.0	134.9	116.0	101.8	96.5
67.5°	129.9	117.8	99.7	86.1	81.9
70°	112.5	100.4	82.6	71.6	67.3
72.5°	95.4	83.7	67.3	57.3	54.8
75°	78.3	67.6	52.7	44.9	42.4
77.5°	60.9	52.3	39.9	33.8	31.7
80°	46.3	37.7	27.8	24.6	23.9
82.5°	32.0	24.6	18.5	17.4	17.1
85°	19.6	13.2	11.4	11.0	10.7
87.5°	8.2	5.7	5.3	5.3	5.0
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	15.54	17.11	15.90	17.43	17.74	13.97	15.55	14.34	15.86	16.18
	3H	17.32	18.74	17.70	19.07	19.43	15.29	16.71	15.66	17.03	17.39
	4H	17.98	19.32	18.38	19.67	20.04	15.70	17.03	16.10	17.38	17.76
	6H	18.45	19.69	18.87	20.05	20.44	15.95	17.19	16.37	17.55	17.94
	8H	18.60	19.78	19.03	20.17	20.57	16.03	17.21	16.46	17.60	18.00
	12H	18.70	19.83	19.13	20.21	20.64	16.09	17.22	16.52	17.60	18.03
4H	2H	15.93	17.26	16.33	17.61	17.99	14.66	15.99	15.06	16.34	16.72
	3H	17.91	19.02	18.32	19.42	19.82	16.16	17.27	16.57	17.67	18.07
	4H	18.70	19.70	19.13	20.11	20.55	16.66	17.66	17.09	18.07	18.51
	6H	19.29	20.16	19.75	20.60	21.06	17.00	17.87	17.46	18.31	18.77
	8H	19.48	20.30	19.94	20.74	21.21	17.11	17.93	17.57	18.37	18.84
	12H	19.62	20.35	20.10	20.83	21.30	17.20	17.93	17.68	18.40	18.87
8H	4H	18.82	19.64	19.28	20.08	20.55	16.97	17.79	17.43	18.23	18.70
	6H	19.50	20.17	19.99	20.66	21.14	17.40	18.07	17.89	18.56	19.04
	8H	19.74	20.35	20.26	20.86	21.35	17.55	18.16	18.07	18.67	19.16
	12H	19.94	20.48	20.45	20.97	21.53	17.69	18.23	18.20	18.72	19.28
12H	4H	18.82	19.55	19.30	20.02	20.49	17.01	17.74	17.49	18.22	18.69
	6H	19.49	20.10	20.00	20.61	21.09	17.45	18.05	17.96	18.56	19.05
	8H	19.78	20.31	20.29	20.81	21.37	17.65	18.19	18.16	18.68	19.24