

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: P243646

Luminaire Tested: S125DRP-H610D930-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243646
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-H610D930-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

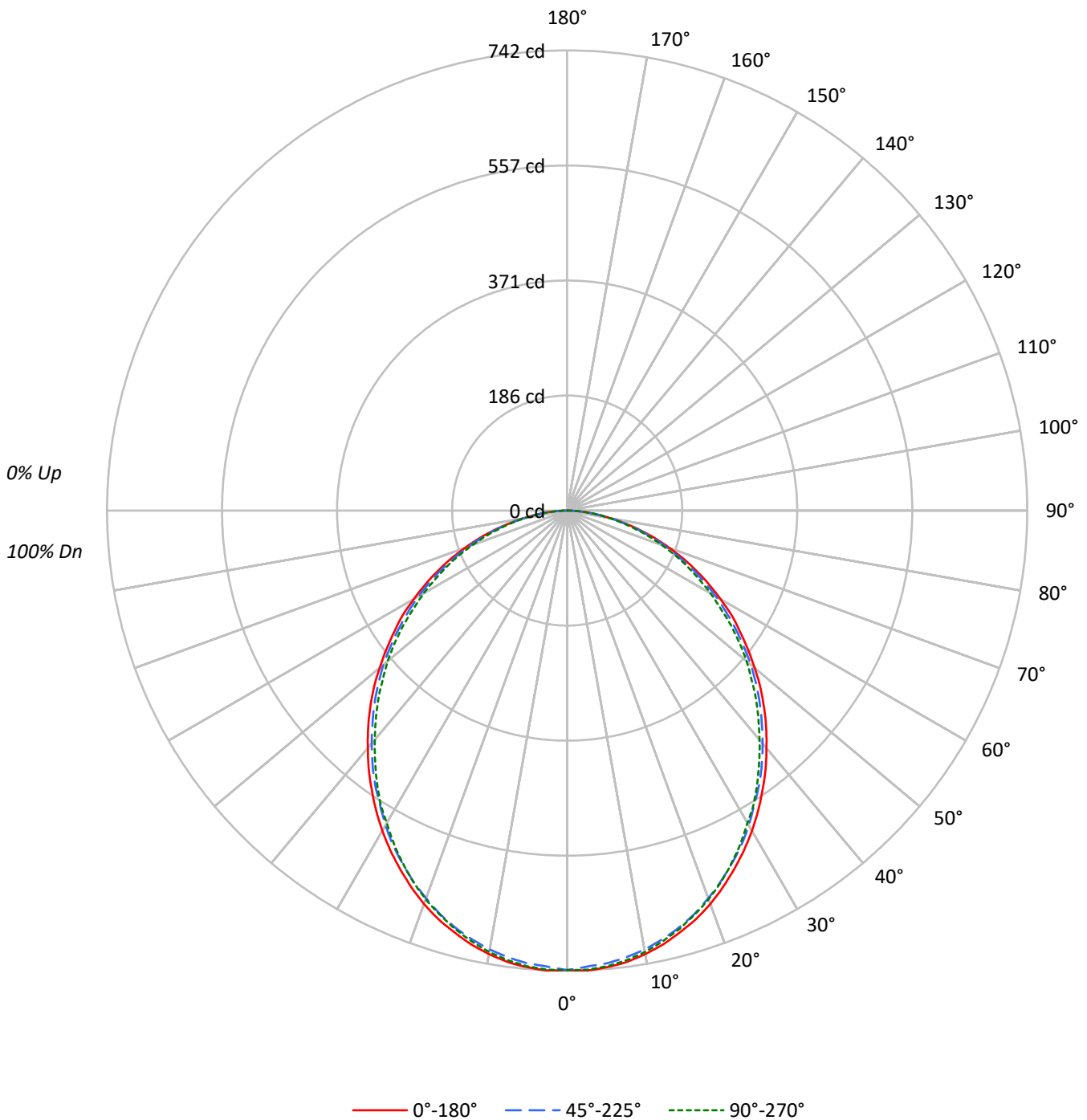
Lumens per Lamp: N/A
Luminaire Lumens: 1912.4 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 17.2
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																												
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84																												
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70																												
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60																												
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51																												
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44																												
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39																												
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35																												
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31																												
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28																												
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5266	5266	5266
5°	5274	5227	5262
10°	5241	5186	5217
15°	5179	5123	5140
20°	5106	5032	5044
25°	5000	4927	4919
30°	4894	4808	4773
35°	4768	4683	4640
40°	4640	4549	4478
45°	4513	4415	4332
50°	4363	4274	4177
55°	4217	4102	3994
60°	4057	3940	3801
65°	3866	3730	3602
70°	3626	3491	3377
75°	3345	3238	3089
80°	2914	2894	2824
85°	2528	2528	2398

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4513 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.9	3.7
10°-20°	197.2	10.3
20°-30°	290.7	15.2
30°-40°	338.6	17.7
40°-50°	339.3	17.7
50°-60°	296.6	15.5
60°-70°	220.1	11.5
70°-80°	124.9	6.5
80°-90°	35.0	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°	557.9	29.2
0°-40°	896.5	46.9
0°-60°	1532.4	80.1
0°-90°	1912.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1912.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	741	741	741	741	741	
5°	739	738	733	738	738	70
15°	704	703	696	700	698	199
25°	638	635	628	630	627	294
35°	550	546	540	536	535	344
45°	449	448	439	433	431	346
55°	340	340	331	324	322	305
65°	230	228	222	217	214	228
75°	122	120	118	116	112	129
85°	31	31	31	30	29	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	740.9	740.9	740.9	740.9	740.9
2.5°	742.5	741.4	736.0	741.4	740.9
5°	739.2	738.1	732.7	738.1	737.6
7.5°	734.3	732.7	726.7	732.2	731.1
10°	726.2	725.1	718.6	722.9	722.9
12.5°	716.4	714.8	708.2	712.0	711.5
15°	703.9	702.8	696.3	700.1	698.5
17.5°	690.8	688.1	682.1	685.4	683.2
20°	675.1	672.9	665.3	668.0	666.9
22.5°	657.1	654.4	647.4	649.0	648.4
25°	637.6	635.4	628.3	630.0	627.3
27.5°	617.5	614.7	608.2	608.2	605.5
30°	596.3	593.6	585.9	585.9	581.6
32.5°	573.4	571.3	562.0	561.5	560.4
35°	549.5	546.3	539.7	536.5	534.8
37.5°	525.6	522.9	515.8	511.5	508.8
40°	500.1	498.4	490.3	486.5	482.7
42.5°	475.1	473.4	464.7	458.2	456.6
45°	449.0	447.9	439.2	432.7	431.0
47.5°	422.9	421.8	413.1	406.0	403.3
50°	394.6	394.6	386.5	379.4	377.8
52.5°	367.4	366.9	358.7	351.7	350.0
55°	340.3	339.7	331.0	324.0	322.3
57.5°	314.7	311.5	303.8	298.4	293.0
60°	285.4	283.7	277.2	270.1	267.4
62.5°	258.2	256.0	249.5	243.5	239.7
65°	229.9	228.3	221.8	216.9	214.2
67.5°	203.3	201.1	194.6	190.8	188.6
70°	174.5	172.8	168.0	163.1	162.5
72.5°	148.9	146.8	144.0	139.7	137.5
75°	121.8	119.6	117.9	115.8	112.5
77.5°	95.7	94.6	93.5	91.9	90.2
80°	71.2	71.2	70.7	69.6	69.0
82.5°	50.5	51.1	49.5	48.4	48.4
85°	31.0	31.0	31.0	29.9	29.4
87.5°	15.2	13.6	13.6	12.5	12.5
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	17.08	18.69	17.44	19.01	19.32	16.74	18.36	17.11	18.67	18.99
	3H	18.84	20.30	19.21	20.62	20.98	18.46	19.91	18.83	20.24	20.60
	4H	19.49	20.86	19.89	21.21	21.58	19.09	20.47	19.49	20.81	21.19
	6H	19.95	21.22	20.36	21.59	21.98	19.57	20.84	19.98	21.21	21.60
	8H	20.10	21.31	20.52	21.70	22.10	19.72	20.94	20.15	21.33	21.73
	12H	20.20	21.36	20.63	21.74	22.17	19.82	20.99	20.25	21.37	21.80
4H	2H	17.65	19.03	18.05	19.37	19.75	17.39	18.76	17.78	19.11	19.48
	3H	19.63	20.78	20.04	21.18	21.58	19.32	20.47	19.72	20.86	21.26
	4H	20.41	21.45	20.84	21.86	22.30	20.08	21.12	20.51	21.54	21.97
	6H	21.00	21.91	21.45	22.35	22.81	20.68	21.59	21.14	22.03	22.49
	8H	21.20	22.05	21.66	22.49	22.96	20.88	21.73	21.34	22.18	22.64
	12H	21.34	22.11	21.82	22.58	23.05	21.03	21.79	21.51	22.27	22.74
8H	4H	20.69	21.54	21.15	21.99	22.45	20.40	21.25	20.86	21.70	22.16
	6H	21.40	22.11	21.89	22.60	23.07	21.13	21.83	21.62	22.32	22.80
	8H	21.67	22.31	22.18	22.81	23.30	21.40	22.03	21.91	22.54	23.02
	12H	21.89	22.46	22.40	22.95	23.51	21.61	22.18	22.12	22.67	23.23
12H	4H	20.72	21.48	21.20	21.96	22.43	20.44	21.20	20.92	21.68	22.15
	6H	21.45	22.09	21.96	22.59	23.08	21.18	21.82	21.69	22.33	22.81
	8H	21.78	22.34	22.29	22.83	23.39	21.51	22.07	22.02	22.56	23.13