

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: P243627

Luminaire Tested: S125DRP-H610D927-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243627
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-H610D927-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

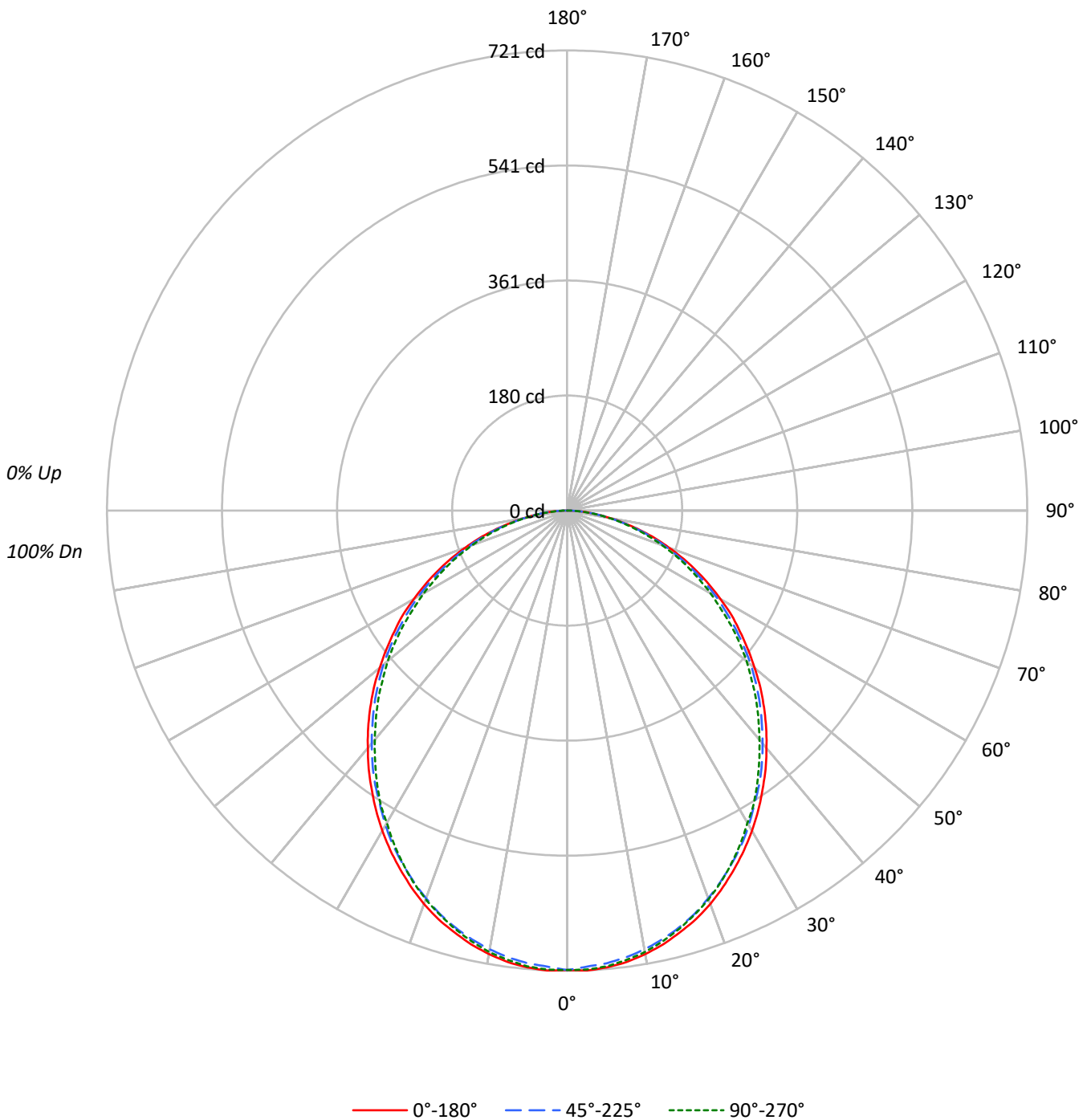
Lumens per Lamp: N/A
Luminaire Lumens: 1858.1 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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°	5116	5116	5116
5°	5125	5079	5113
10°	5092	5039	5069
15°	5032	4978	4994
20°	4961	4889	4901
25°	4858	4788	4780
30°	4755	4672	4638
35°	4632	4550	4509
40°	4508	4420	4351
45°	4384	4289	4209
50°	4239	4152	4059
55°	4097	3985	3881
60°	3942	3828	3693
65°	3757	3624	3500
70°	3522	3391	3281
75°	3249	3147	3001
80°	2832	2812	2746
85°	2455	2455	2324

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4384 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.9	3.7
10°-20°	191.6	10.3
20°-30°	282.5	15.2
30°-40°	329.0	17.7
40°-50°	329.7	17.7
50°-60°	288.2	15.5
60°-70°	213.9	11.5
70°-80°	121.3	6.5
80°-90°	34.0	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°	542.1	29.2
0°-40°	871.1	46.9
0°-60°	1488.9	80.1
0°-90°	1858.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1858.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	718	717	712	717	717	68
15°	684	683	676	680	679	193
25°	620	617	610	612	610	285
35°	534	531	524	521	520	334
45°	436	435	427	420	419	336
55°	331	330	322	315	313	296
65°	223	222	216	211	208	221
75°	118	116	115	112	109	125
85°	30	30	30	29	28	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	719.8	719.8	719.8	719.8	719.8
2.5°	721.4	720.4	715.1	720.4	719.8
5°	718.3	717.2	711.9	717.2	716.7
7.5°	713.5	711.9	706.1	711.4	710.3
10°	705.6	704.5	698.2	702.4	702.4
12.5°	696.1	694.5	688.2	691.9	691.3
15°	683.9	682.9	676.5	680.2	678.7
17.5°	671.3	668.6	662.8	666.0	663.9
20°	655.9	653.8	646.4	649.1	648.0
22.5°	638.5	635.9	629.0	630.6	630.1
25°	619.5	617.4	610.5	612.1	609.5
27.5°	600.0	597.3	591.0	591.0	588.3
30°	579.4	576.7	569.3	569.3	565.1
32.5°	557.2	555.1	546.1	545.6	544.5
35°	533.9	530.8	524.4	521.3	519.7
37.5°	510.7	508.1	501.2	497.0	494.3
40°	485.9	484.3	476.4	472.7	469.0
42.5°	461.6	460.0	451.6	445.2	443.6
45°	436.2	435.2	426.7	420.4	418.8
47.5°	410.9	409.8	401.4	394.5	391.9
50°	383.4	383.4	375.5	368.6	367.1
52.5°	357.0	356.5	348.6	341.7	340.1
55°	330.6	330.1	321.6	314.8	313.2
57.5°	305.8	302.6	295.2	289.9	284.7
60°	277.3	275.7	269.3	262.5	259.8
62.5°	250.9	248.8	242.4	236.6	232.9
65°	223.4	221.8	215.5	210.7	208.1
67.5°	197.5	195.4	189.1	185.4	183.3
70°	169.5	167.9	163.2	158.4	157.9
72.5°	144.7	142.6	140.0	135.7	133.6
75°	118.3	116.2	114.6	112.5	109.3
77.5°	93.0	91.9	90.8	89.3	87.7
80°	69.2	69.2	68.7	67.6	67.1
82.5°	49.1	49.6	48.1	47.0	47.0
85°	30.1	30.1	30.1	29.0	28.5
87.5°	14.8	13.2	13.2	12.1	12.1
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	16.98	18.59	17.34	18.91	19.22	16.64	18.26	17.01	18.57	18.89
	3H	18.74	20.20	19.11	20.52	20.88	18.36	19.81	18.73	20.14	20.50
	4H	19.39	20.76	19.79	21.11	21.48	18.99	20.37	19.39	20.71	21.09
	6H	19.85	21.12	20.26	21.49	21.88	19.47	20.74	19.88	21.11	21.50
	8H	20.00	21.21	20.42	21.60	22.00	19.62	20.84	20.05	21.23	21.63
	12H	20.10	21.26	20.53	21.64	22.07	19.72	20.89	20.15	21.27	21.70
4H	2H	17.55	18.93	17.95	19.27	19.65	17.29	18.66	17.68	19.01	19.38
	3H	19.53	20.68	19.94	21.08	21.48	19.22	20.37	19.62	20.76	21.16
	4H	20.31	21.35	20.74	21.76	22.20	19.98	21.02	20.41	21.44	21.87
	6H	20.90	21.81	21.35	22.25	22.71	20.58	21.49	21.04	21.93	22.39
	8H	21.10	21.95	21.56	22.39	22.86	20.78	21.63	21.24	22.08	22.54
	12H	21.24	22.01	21.72	22.48	22.95	20.93	21.69	21.41	22.17	22.64
8H	4H	20.59	21.44	21.05	21.88	22.35	20.30	21.15	20.76	21.60	22.06
	6H	21.30	22.01	21.79	22.50	22.97	21.03	21.73	21.52	22.22	22.70
	8H	21.57	22.21	22.08	22.71	23.20	21.30	21.93	21.81	22.44	22.92
	12H	21.79	22.35	22.30	22.85	23.41	21.51	22.07	22.02	22.56	23.13
12H	4H	20.62	21.38	21.10	21.86	22.33	20.34	21.10	20.82	21.58	22.05
	6H	21.35	21.99	21.86	22.49	22.98	21.08	21.72	21.59	22.23	22.71
	8H	21.68	22.24	22.19	22.73	23.29	21.41	21.97	21.92	22.46	23.03