

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: P242787

Luminaire Tested: S125DRP-S850D930-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242787
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S850D930-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

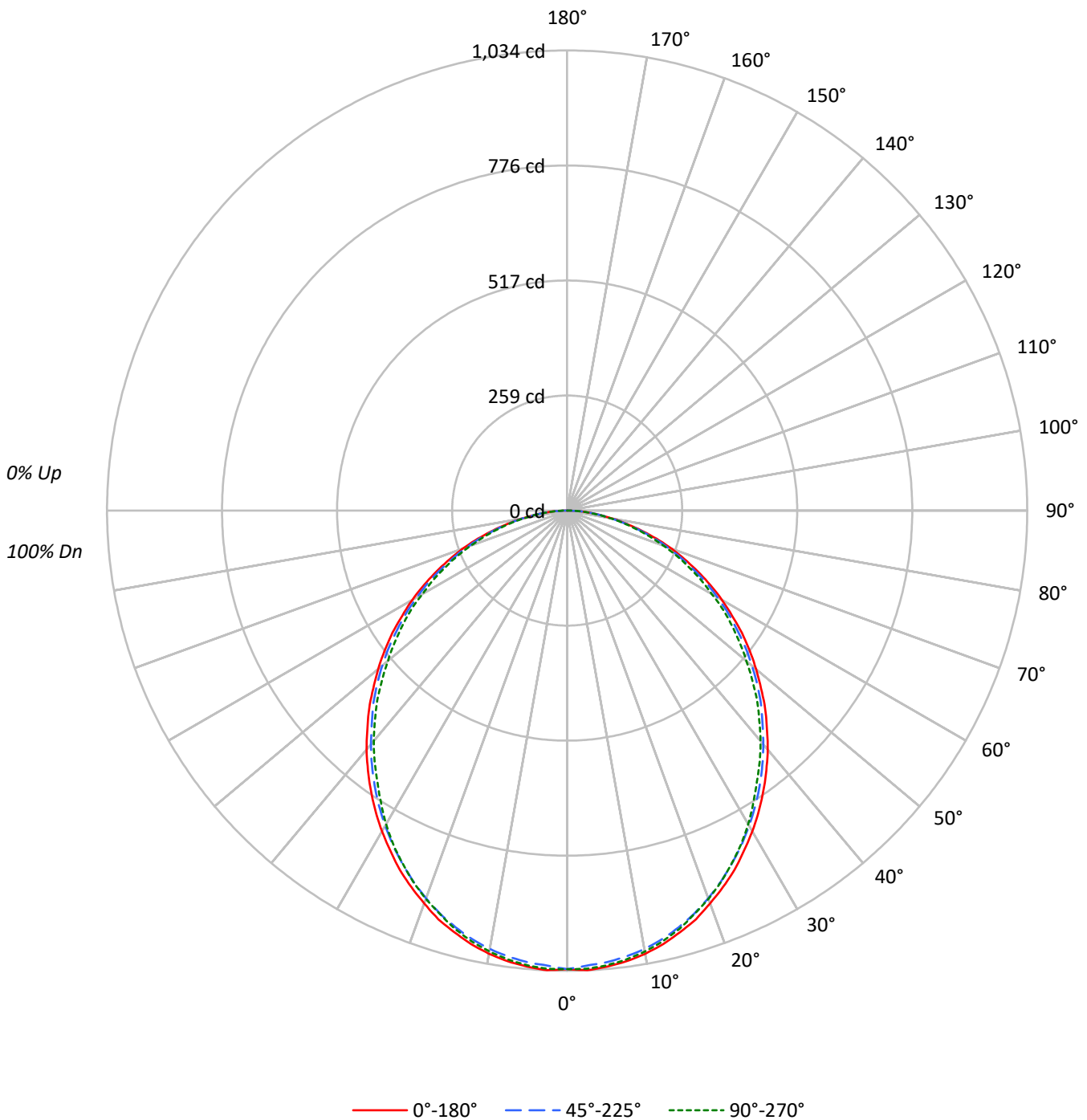
Lumens per Lamp: N/A
Luminaire Lumens: 2682.2 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (A_{in}): 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	94	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	72	70																												
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59																												
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																												
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44																												
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39																												
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34																												
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31																												
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28																												
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7324	7324	7324
5°	7341	7271	7317
10°	7296	7220	7261
15°	7217	7133	7163
20°	7104	7011	7023
25°	6982	6867	6860
30°	6831	6711	6678
35°	6670	6544	6452
40°	6506	6362	6271
45°	6326	6196	6072
50°	6130	5995	5815
55°	5940	5768	5607
60°	5713	5539	5343
65°	5444	5266	5087
70°	5185	4948	4777
75°	4723	4567	4410
80°	4203	4138	4040
85°	3653	3727	3523

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6326 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.2	3.6
10°-20°	274.7	10.2
20°-30°	405.5	15.1
30°-40°	473.1	17.6
40°-50°	475.2	17.7
50°-60°	417.1	15.6
60°-70°	310.7	11.6
70°-80°	177.4	6.6
80°-90°	51.2	1.9
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°	777.4	29.0
0°-40°	1250.6	46.6
0°-60°	2142.9	79.9
0°-90°	2682.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2682.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1030	1030	1030	1030	1030	
5°	1029	1027	1019	1026	1026	98
15°	981	978	969	974	974	277
25°	890	886	876	877	875	410
35°	769	766	754	750	744	481
45°	629	626	616	607	604	485
55°	479	477	466	458	452	428
65°	324	322	313	306	302	321
75°	172	170	166	164	161	183
85°	45	46	46	45	43	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1030.5	1030.5	1030.5	1030.5	1030.5
2.5°	1033.8	1031.4	1023.2	1031.4	1030.5
5°	1028.9	1027.3	1019.1	1026.5	1025.6
7.5°	1021.6	1019.9	1011.0	1018.3	1017.5
10°	1011.0	1009.3	1000.4	1006.9	1006.1
12.5°	997.9	994.7	986.5	991.4	991.4
15°	980.8	978.4	969.4	973.5	973.5
17.5°	962.9	958.8	949.8	954.7	950.6
20°	939.2	937.6	927.0	932.7	928.6
22.5°	915.6	912.3	902.5	905.8	903.4
25°	890.3	886.2	875.6	877.3	874.8
27.5°	861.0	858.5	847.9	848.7	846.3
30°	832.4	830.0	817.7	816.1	813.7
32.5°	801.4	797.4	786.8	783.5	778.6
35°	768.8	765.6	754.2	750.1	743.6
37.5°	735.4	731.3	720.7	715.0	710.9
40°	701.2	697.1	685.7	678.3	675.9
42.5°	664.5	661.2	649.8	643.3	639.2
45°	629.4	626.1	616.4	606.6	604.1
47.5°	591.1	591.9	579.7	569.9	564.2
50°	554.4	552.0	542.2	531.6	525.9
52.5°	516.9	515.3	504.7	495.7	489.2
55°	479.4	476.9	465.5	458.2	452.5
57.5°	439.4	438.6	428.8	419.1	416.6
60°	401.9	398.7	389.7	381.6	375.9
62.5°	362.8	360.4	353.0	344.1	340.0
65°	323.7	322.0	313.1	305.7	302.5
67.5°	285.4	282.1	275.6	269.0	267.4
70°	249.5	245.4	238.1	233.2	229.9
72.5°	210.3	207.9	203.8	198.1	194.9
75°	172.0	170.4	166.3	163.9	160.6
77.5°	136.2	135.3	132.9	131.3	128.8
80°	102.7	102.7	101.1	100.3	98.7
82.5°	73.4	71.7	71.7	70.1	70.1
85°	44.8	45.7	45.7	44.8	43.2
87.5°	22.0	22.0	21.2	21.2	19.6
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	18.27	19.89	18.63	20.20	20.51	17.94	19.56	18.31	19.87	20.19
	3H	20.04	21.50	20.41	21.83	22.19	19.67	21.13	20.05	21.46	21.82
	4H	20.69	22.07	21.09	22.42	22.79	20.32	21.70	20.72	22.04	22.42
	6H	21.17	22.45	21.58	22.81	23.20	20.80	22.08	21.22	22.45	22.84
	8H	21.33	22.55	21.75	22.93	23.33	20.97	22.18	21.39	22.57	22.97
	12H	21.43	22.60	21.86	22.98	23.41	21.08	22.24	21.51	22.63	23.05
4H	2H	18.85	20.22	19.24	20.57	20.95	18.59	19.96	18.99	20.31	20.69
	3H	20.84	22.00	21.25	22.39	22.79	20.54	21.69	20.95	22.09	22.49
	4H	21.63	22.67	22.06	23.09	23.52	21.31	22.36	21.74	22.77	23.21
	6H	22.24	23.15	22.69	23.59	24.04	21.93	22.84	22.38	23.28	23.74
	8H	22.44	23.29	22.90	23.74	24.20	22.14	22.99	22.60	23.43	23.90
	12H	22.59	23.36	23.07	23.84	24.31	22.29	23.06	22.77	23.54	24.00
8H	4H	21.91	22.77	22.37	23.21	23.68	21.64	22.49	22.10	22.93	23.40
	6H	22.64	23.35	23.14	23.84	24.32	22.38	23.09	22.87	23.57	24.05
	8H	22.92	23.56	23.43	24.07	24.55	22.66	23.30	23.17	23.80	24.29
	12H	23.15	23.72	23.66	24.21	24.77	22.89	23.46	23.40	23.95	24.51
12H	4H	21.94	22.71	22.42	23.19	23.66	21.67	22.44	22.15	22.92	23.39
	6H	22.70	23.33	23.20	23.84	24.33	22.44	23.08	22.95	23.58	24.07
	8H	23.03	23.60	23.54	24.09	24.65	22.78	23.34	23.29	23.83	24.40