

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: P242777

Luminaire Tested: S125DRP-S610D835-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242777
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-S610D835-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

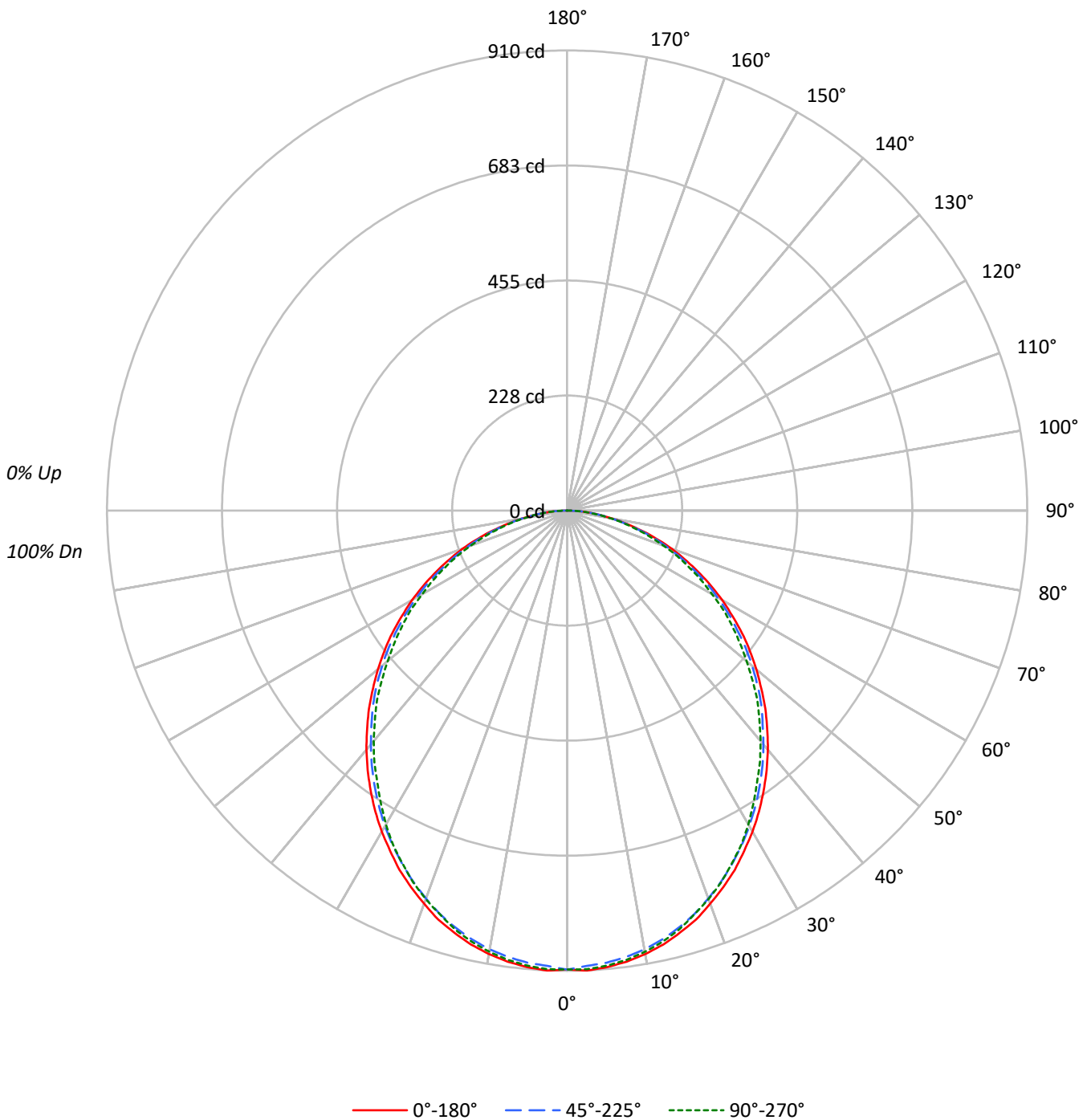
Lumens per Lamp: N/A
Luminaire Lumens: 2362.2 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 18.8
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	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°	6451	6451	6451
5°	6465	6403	6445
10°	6426	6358	6394
15°	6356	6282	6308
20°	6257	6175	6185
25°	6149	6048	6042
30°	6016	5911	5881
35°	5875	5763	5681
40°	5729	5603	5522
45°	5571	5456	5348
50°	5399	5280	5121
55°	5232	5080	4938
60°	5032	4878	4705
65°	4795	4637	4480
70°	4565	4358	4208
75°	4160	4023	3886
80°	3704	3643	3557
85°	3221	3278	3107

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5571 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.6	3.6
10°-20°	241.9	10.2
20°-30°	357.1	15.1
30°-40°	416.7	17.6
40°-50°	418.5	17.7
50°-60°	367.4	15.6
60°-70°	273.6	11.6
70°-80°	156.3	6.6
80°-90°	45.1	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°	684.7	29.0
0°-40°	1101.4	46.6
0°-60°	1887.2	79.9
0°-90°	2362.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2362.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	908	908	908	908	908	
5°	906	905	898	904	903	86
15°	864	862	854	857	857	244
25°	784	780	771	773	770	361
35°	677	674	664	661	655	424
45°	554	551	543	534	532	427
55°	422	420	410	404	398	377
65°	285	284	276	269	266	283
75°	152	150	146	144	142	161
85°	40	40	40	40	38	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	907.6	907.6	907.6	907.6	907.6
2.5°	910.5	908.3	901.1	908.3	907.6
5°	906.1	904.7	897.5	904.0	903.3
7.5°	899.7	898.3	890.4	896.8	896.1
10°	890.4	888.9	881.0	886.8	886.0
12.5°	878.9	876.0	868.8	873.1	873.1
15°	863.8	861.6	853.7	857.3	857.3
17.5°	848.0	844.4	836.5	840.8	837.2
20°	827.2	825.7	816.4	821.4	817.8
22.5°	806.3	803.5	794.9	797.7	795.6
25°	784.1	780.5	771.2	772.6	770.4
27.5°	758.2	756.1	746.7	747.5	745.3
30°	733.1	731.0	720.2	718.7	716.6
32.5°	705.8	702.2	692.9	690.0	685.7
35°	677.1	674.2	664.2	660.6	654.8
37.5°	647.7	644.1	634.7	629.7	626.1
40°	617.5	613.9	603.9	597.4	595.2
42.5°	585.2	582.3	572.3	566.5	562.9
45°	554.3	551.4	542.8	534.2	532.1
47.5°	520.6	521.3	510.5	501.9	496.9
50°	488.3	486.1	477.5	468.2	463.1
52.5°	455.2	453.8	444.5	436.6	430.8
55°	422.2	420.0	410.0	403.5	398.5
57.5°	387.0	386.3	377.7	369.1	366.9
60°	354.0	351.1	343.2	336.0	331.0
62.5°	319.5	317.4	310.9	303.0	299.4
65°	285.1	283.6	275.7	269.3	266.4
67.5°	251.3	248.4	242.7	236.9	235.5
70°	219.7	216.1	209.7	205.4	202.5
72.5°	185.3	183.1	179.5	174.5	171.6
75°	151.5	150.1	146.5	144.3	141.5
77.5°	119.9	119.2	117.0	115.6	113.4
80°	90.5	90.5	89.0	88.3	86.9
82.5°	64.6	63.2	63.2	61.8	61.8
85°	39.5	40.2	40.2	39.5	38.1
87.5°	19.4	19.4	18.7	18.7	17.2
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	17.83	19.44	18.19	19.76	20.07	17.50	19.12	17.86	19.43	19.75
	3H	19.60	21.06	19.97	21.38	21.74	19.23	20.69	19.61	21.02	21.38
	4H	20.25	21.63	20.65	21.98	22.35	19.88	21.25	20.28	21.60	21.98
	6H	20.73	22.01	21.14	22.37	22.76	20.36	21.64	20.77	22.00	22.39
	8H	20.89	22.10	21.31	22.49	22.89	20.52	21.74	20.95	22.13	22.53
	12H	20.99	22.16	21.42	22.54	22.97	20.63	21.80	21.06	22.18	22.61
4H	2H	18.40	19.78	18.80	20.13	20.51	18.15	19.52	18.54	19.87	20.25
	3H	20.40	21.55	20.81	21.95	22.35	20.10	21.25	20.51	21.65	22.05
	4H	21.19	22.23	21.62	22.64	23.08	20.87	21.92	21.30	22.33	22.76
	6H	21.79	22.71	22.25	23.15	23.60	21.49	22.40	21.94	22.84	23.30
	8H	22.00	22.85	22.46	23.30	23.76	21.70	22.55	22.16	22.99	23.46
	12H	22.15	22.92	22.63	23.40	23.86	21.85	22.62	22.33	23.09	23.56
8H	4H	21.47	22.33	21.93	22.77	23.23	21.20	22.05	21.66	22.49	22.96
	6H	22.20	22.91	22.70	23.40	23.88	21.93	22.64	22.43	23.13	23.61
	8H	22.48	23.12	22.99	23.63	24.11	22.22	22.86	22.73	23.36	23.85
	12H	22.71	23.28	23.22	23.77	24.33	22.45	23.02	22.96	23.51	24.07
12H	4H	21.50	22.27	21.98	22.75	23.22	21.23	22.00	21.71	22.47	22.94
	6H	22.25	22.89	22.76	23.40	23.89	22.00	22.63	22.50	23.14	23.63
	8H	22.59	23.16	23.10	23.65	24.21	22.34	22.90	22.85	23.39	23.95