

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: P242772

Luminaire Tested: S125DRP-S610D830-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242772
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-S610D830-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

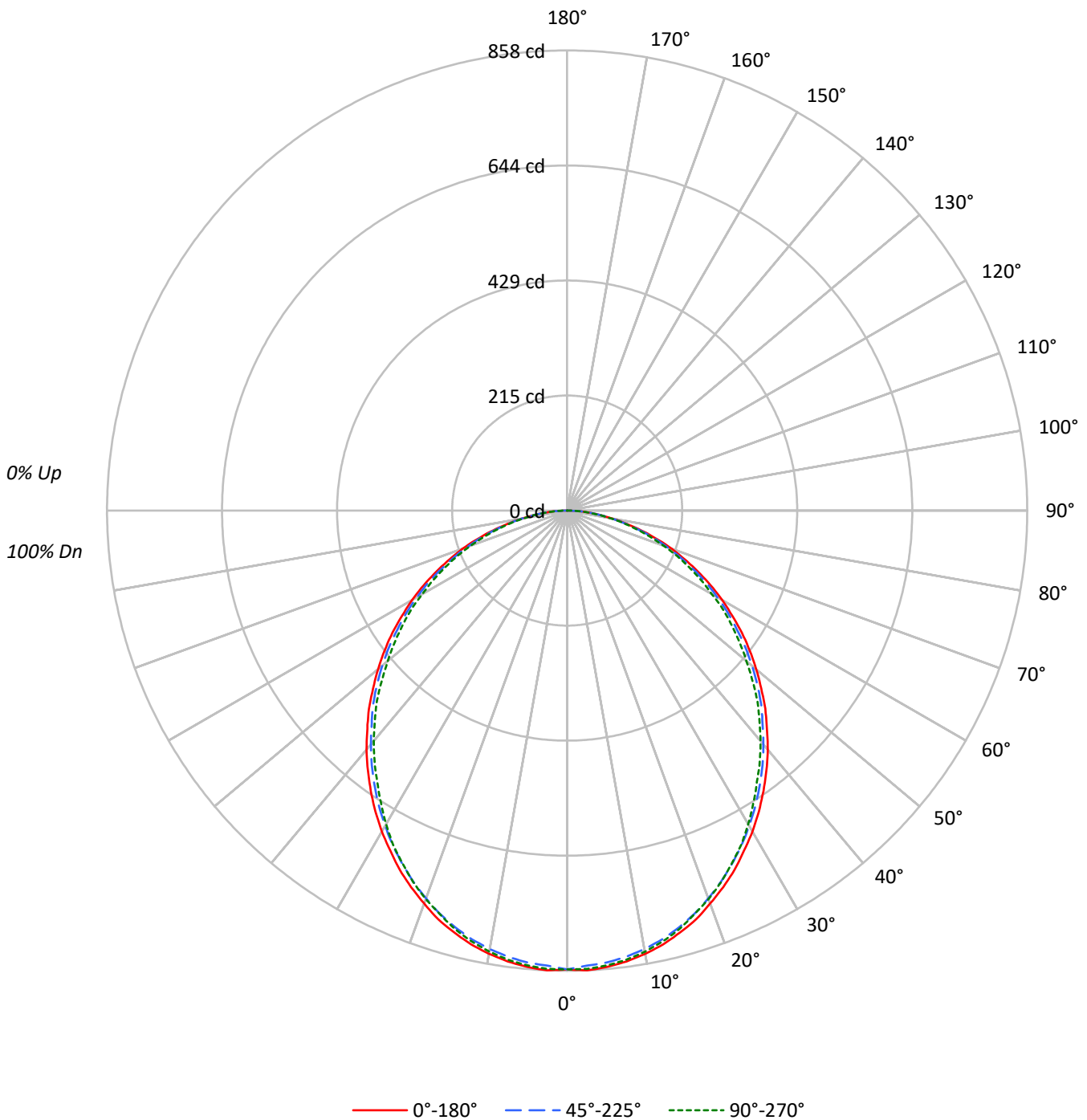
Lumens per Lamp: N/A
Luminaire Lumens: 2226.5 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

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°	6080	6080	6080
5°	6094	6036	6074
10°	6056	5993	6027
15°	5991	5921	5946
20°	5896	5820	5830
25°	5795	5700	5695
30°	5671	5571	5543
35°	5537	5431	5355
40°	5400	5281	5205
45°	5252	5142	5041
50°	5088	4977	4826
55°	4930	4788	4654
60°	4742	4598	4435
65°	4519	4371	4223
70°	4304	4106	3965
75°	3921	3792	3661
80°	3491	3434	3352
85°	3034	3091	2928

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5252 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.7	3.6
10°-20°	228.0	10.2
20°-30°	336.6	15.1
30°-40°	392.7	17.6
40°-50°	394.5	17.7
50°-60°	346.2	15.6
60°-70°	257.9	11.6
70°-80°	147.3	6.6
80°-90°	42.5	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°	645.3	29.0
0°-40°	1038.1	46.6
0°-60°	1778.8	79.9
0°-90°	2226.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2226.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	855	855	855	855	855	
5°	854	853	846	852	851	81
15°	814	812	805	808	808	230
25°	739	736	727	728	726	340
35°	638	636	626	623	617	399
45°	522	520	512	504	502	403
55°	398	396	386	380	376	355
65°	269	267	260	254	251	266
75°	143	141	138	136	133	152
85°	37	38	38	37	36	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	855.4	855.4	855.4	855.4	855.4
2.5°	858.1	856.1	849.3	856.1	855.4
5°	854.1	852.7	846.0	852.1	851.4
7.5°	848.0	846.6	839.2	845.3	844.6
10°	839.2	837.8	830.4	835.8	835.1
12.5°	828.4	825.7	818.9	823.0	823.0
15°	814.2	812.1	804.7	808.1	808.1
17.5°	799.3	795.9	788.4	792.5	789.1
20°	779.6	778.3	769.5	774.2	770.8
22.5°	760.0	757.3	749.2	751.9	749.9
25°	739.0	735.6	726.9	728.2	726.2
27.5°	714.7	712.6	703.8	704.5	702.5
30°	691.0	689.0	678.8	677.4	675.4
32.5°	665.3	661.9	653.1	650.4	646.3
35°	638.2	635.5	626.0	622.6	617.2
37.5°	610.4	607.1	598.3	593.5	590.1
40°	582.0	578.6	569.2	563.1	561.0
42.5°	551.6	548.9	539.4	534.0	530.6
45°	522.5	519.8	511.6	503.5	501.5
47.5°	490.7	491.3	481.2	473.1	468.3
50°	460.2	458.2	450.1	441.3	436.5
52.5°	429.1	427.7	418.9	411.5	406.1
55°	397.9	395.9	386.4	380.3	375.6
57.5°	364.8	364.1	356.0	347.9	345.8
60°	333.6	330.9	323.5	316.7	312.0
62.5°	301.2	299.1	293.0	285.6	282.2
65°	268.7	267.3	259.9	253.8	251.1
67.5°	236.9	234.2	228.7	223.3	222.0
70°	207.1	203.7	197.6	193.6	190.8
72.5°	174.6	172.6	169.2	164.5	161.7
75°	142.8	141.4	138.1	136.0	133.3
77.5°	113.0	112.3	110.3	109.0	106.9
80°	85.3	85.3	83.9	83.2	81.9
82.5°	60.9	59.6	59.6	58.2	58.2
85°	37.2	37.9	37.9	37.2	35.9
87.5°	18.3	18.3	17.6	17.6	16.2
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	17.62	19.24	17.99	19.55	19.87	17.29	18.91	17.66	19.23	19.54
	3H	19.39	20.85	19.77	21.18	21.54	19.03	20.49	19.40	20.81	21.17
	4H	20.05	21.42	20.45	21.77	22.15	19.67	21.05	20.07	21.40	21.77
	6H	20.52	21.80	20.93	22.16	22.56	20.16	21.43	20.57	21.80	22.19
	8H	20.68	21.90	21.10	22.29	22.69	20.32	21.54	20.74	21.93	22.33
	12H	20.79	21.95	21.22	22.34	22.76	20.43	21.60	20.86	21.98	22.41
4H	2H	18.20	19.58	18.60	19.92	20.30	17.94	19.32	18.34	19.66	20.04
	3H	20.19	21.35	20.60	21.75	22.15	19.89	21.05	20.30	21.44	21.84
	4H	20.98	22.02	21.41	22.44	22.87	20.67	21.71	21.10	22.12	22.56
	6H	21.59	22.50	22.04	22.94	23.40	21.28	22.19	21.73	22.63	23.09
	8H	21.79	22.65	22.25	23.09	23.56	21.49	22.34	21.95	22.79	23.25
	12H	21.95	22.71	22.43	23.19	23.66	21.65	22.41	22.13	22.89	23.36
8H	4H	21.27	22.12	21.73	22.56	23.03	20.99	21.84	21.45	22.29	22.75
	6H	22.00	22.71	22.49	23.19	23.67	21.73	22.44	22.22	22.93	23.40
	8H	22.28	22.91	22.78	23.42	23.91	22.01	22.65	22.52	23.16	23.64
	12H	22.51	23.07	23.01	23.56	24.12	22.25	22.81	22.75	23.30	23.86
12H	4H	21.30	22.06	21.78	22.54	23.01	21.03	21.79	21.51	22.27	22.74
	6H	22.05	22.69	22.56	23.19	23.68	21.79	22.43	22.30	22.94	23.42
	8H	22.39	22.95	22.89	23.44	24.00	22.13	22.70	22.64	23.19	23.75