

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P334521

Luminaire Tested: **S122IW-S710U840-4F0-1E-UDD-1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334521  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122IW-S710U840-4F0-1E-UDD-1  
Description: DEFINE 2 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
WALL MOUNT, 710 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2485.2 lumens  
Efficiency: N/A  
Efficacy: 177.5 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Indirect

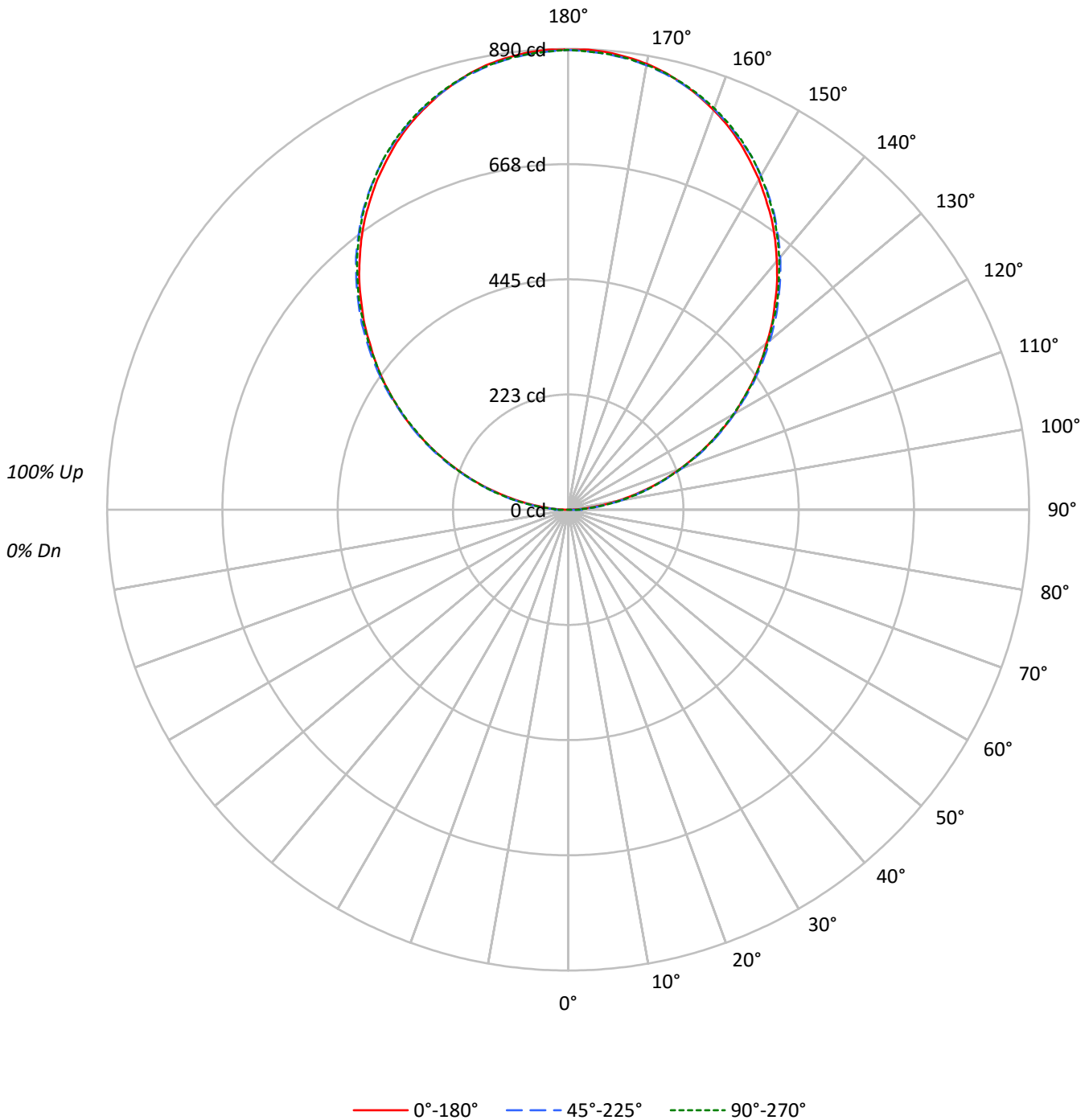
Input Watts (W): 14  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8	0
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7	0
3	72	63	56	51	61	54	49	44	37	34	31	21	20	18	7	6	6	0
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4	0
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	3	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	0	0	0
5°	0	0	0
10°	0	0	0
15°	0	0	0
20°	0	0	0
25°	0	0	0
30°	0	0	0
35°	0	0	0
40°	0	0	0
45°	0	0	0
50°	0	0	0
55°	0	0	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	2.5	0.1
90°-100°	54.9	2.2
100°-110°	174.6	7.0
110°-120°	298.8	12.0
120°-130°	393.0	15.8
130°-140°	441.1	17.7
140°-150°	432.6	17.4
150°-160°	362.9	14.6
160°-170°	240.7	9.7
170°-180°	84.1	3.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.5	0.1
90°-120°	528.4	21.3
90°-150°	1795.1	72.2
90°-180°	2483.0	99.9
0°-180°	2485.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	0	0	0	0	0	
5°	0	0	0	0	0	0
15°	0	0	0	0	0	0
25°	0	0	0	0	0	0
35°	0	0	0	0	0	0
45°	0	0	0	0	0	0
55°	0	0	0	0	0	0
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	1	10	26	25	26	2
95°	39	46	48	48	46	44
105°	161	163	165	166	166	170
115°	300	304	303	302	300	297
125°	436	443	441	438	438	390
135°	564	572	574	573	571	436
145°	685	690	695	695	692	428
155°	783	785	788	791	789	360
165°	852	851	851	856	853	240
175°	886	884	883	888	884	84
180°	888	888	888	888	888	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.7	9.7	26.2	24.7	25.5
92.5°	16.5	22.5	23.2	24.0	24.0
95°	39.0	46.5	48.0	48.0	46.5
97.5°	65.2	71.9	74.9	74.9	74.9
100°	95.2	101.2	103.4	103.4	102.7
102.5°	126.6	131.1	134.1	134.9	134.1
105°	161.1	163.4	164.9	166.4	166.4
107.5°	195.6	198.6	198.6	199.3	195.6
110°	228.6	233.1	233.1	233.1	230.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	264.5	269.0	268.3	266.0	264.5
115°	299.7	304.2	302.7	302.0	299.7
117.5°	335.0	341.0	337.2	335.0	332.7
120°	370.2	376.2	370.2	370.2	367.9
122.5°	402.4	409.9	406.2	403.9	402.4
125°	436.1	442.9	440.6	438.4	437.6
127.5°	469.1	477.3	474.4	471.4	469.1
130°	499.8	509.6	508.1	506.6	503.6
132.5°	534.3	541.8	542.5	538.8	536.5
135°	564.3	572.5	574.0	573.3	571.0
137.5°	597.2	604.0	605.5	604.7	601.7
140°	626.5	633.2	637.0	637.0	634.0
142.5°	656.4	663.2	665.4	666.2	663.2
145°	684.9	690.2	694.7	695.4	692.4
147.5°	710.4	717.1	720.1	721.6	718.6
150°	736.6	741.1	744.1	746.4	744.1
152.5°	759.9	764.4	768.1	771.1	768.1
155°	783.1	785.3	787.6	791.3	789.1
157.5°	803.3	804.8	806.3	811.6	807.8
160°	821.3	822.8	823.6	828.1	825.1
162.5°	837.8	837.8	838.5	843.8	840.0
165°	852.0	851.3	851.3	856.5	852.8
167.5°	864.8	862.5	862.5	867.8	864.0
170°	874.5	872.3	871.5	876.8	872.3
172.5°	881.3	879.0	878.3	883.5	879.0
175°	886.5	884.3	882.8	888.0	883.5
177.5°	889.5	887.3	885.8	890.3	885.8
180°	888.0	888.0	888.0	888.0	888.0

(END OF REPORT)