

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: P243132

Luminaire Tested: **S122DR-H865D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243132  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-48)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122DR-H865D930-X4F0-XX-UDD-F-W  
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2710.4 lumens  
Efficiency: N/A  
Efficacy: 86.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')  
CIE Type: Direct

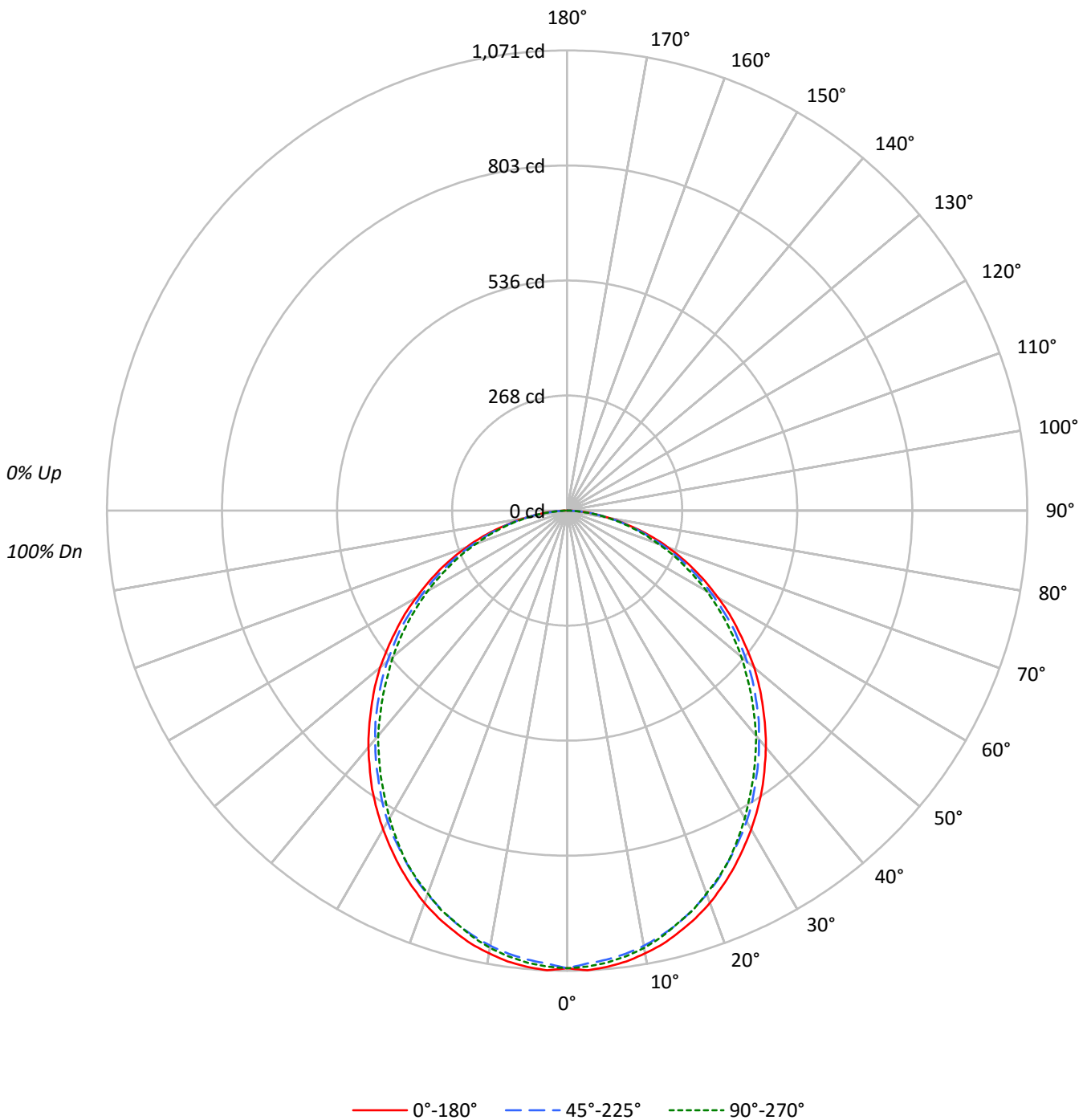
Input Watts (W): 31.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	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	53	40	33	28	39	32	28	38	32	27	37	32	27	26

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

	0°	45°	90°
0°	20288	20288	20288
5°	20384	20065	20197
10°	20241	19899	19993
15°	19998	19629	19611
20°	19701	19263	19222
25°	19291	18816	18795
30°	18849	18374	18181
35°	18400	17805	17577
40°	17893	17281	17013
45°	17348	16739	16316
50°	16843	16174	15679
55°	16136	15585	14997
60°	15444	14846	14286
65°	14779	14071	13449
70°	13890	13177	12520
75°	12644	12136	11562
80°	10980	10662	10234
85°	9441	8370	7715



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.3	3.7
10°-20°	282.3	10.4
20°-30°	415.1	15.3
30°-40°	481.9	17.8
40°-50°	481.3	17.8
50°-60°	419.2	15.5
60°-70°	310.0	11.4
70°-80°	174.7	6.4
80°-90°	45.6	1.7
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°	797.6	29.4
0°-40°	1279.6	47.2
0°-60°	2180.0	80.4
0°-90°	2710.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2710.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1065	1065	1065	1065	1065	
5°	1066	1061	1049	1058	1056	101
15°	1014	1009	995	999	994	286
25°	918	910	895	894	894	423
35°	791	782	766	759	756	494
45°	644	637	621	612	606	497
55°	486	482	469	456	452	435
65°	328	323	312	302	298	324
75°	172	171	165	159	157	183
85°	43	41	38	36	35	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1065.1	1065.1	1065.1	1065.1	1065.1
2.5°	1071.0	1066.1	1055.3	1064.2	1062.2
5°	1066.1	1061.2	1049.4	1058.3	1056.3
7.5°	1058.3	1053.4	1040.6	1049.4	1046.5
10°	1046.5	1040.6	1028.8	1034.7	1033.7
12.5°	1032.8	1026.9	1013.1	1018.0	1016.1
15°	1014.1	1009.2	995.4	999.4	994.5
17.5°	994.5	986.6	973.8	977.8	974.8
20°	971.9	964.0	950.3	952.3	948.3
22.5°	945.4	937.5	924.8	924.8	922.8
25°	917.9	910.0	895.3	894.3	894.3
27.5°	887.5	880.6	865.9	862.9	861.0
30°	857.0	851.1	835.4	829.5	826.6
32.5°	824.6	816.8	802.1	795.2	790.3
35°	791.3	782.4	765.7	758.9	755.9
37.5°	754.9	746.1	731.4	725.5	719.6
40°	719.6	711.7	695.0	686.2	684.2
42.5°	682.3	674.4	659.7	649.9	644.0
45°	644.0	637.1	621.4	611.6	605.7
47.5°	606.7	598.8	585.1	573.3	565.5
50°	568.4	560.6	545.8	532.1	529.1
52.5°	526.2	521.3	506.6	493.8	489.9
55°	485.9	482.0	469.3	456.5	451.6
57.5°	447.7	442.7	428.0	418.2	412.3
60°	405.4	402.5	389.7	378.9	375.0
62.5°	366.2	362.2	351.4	340.7	335.7
65°	327.9	323.0	312.2	302.4	298.4
67.5°	288.6	283.7	274.9	267.0	263.1
70°	249.4	245.4	236.6	229.7	224.8
72.5°	211.1	207.1	199.3	192.4	191.4
75°	171.8	170.8	164.9	159.0	157.1
77.5°	135.5	134.5	130.6	127.6	125.7
80°	100.1	100.1	97.2	94.2	93.3
82.5°	68.7	69.7	66.8	64.8	64.8
85°	43.2	41.2	38.3	36.3	35.3
87.5°	17.7	14.7	13.7	10.8	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)