

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: P334078

Luminaire Tested: **S123RDW-S1000D930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334078  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123RDW-S1000D930-4F0-1E-UDD-F  
Description: DEFINE 3 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2896.2 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Direct

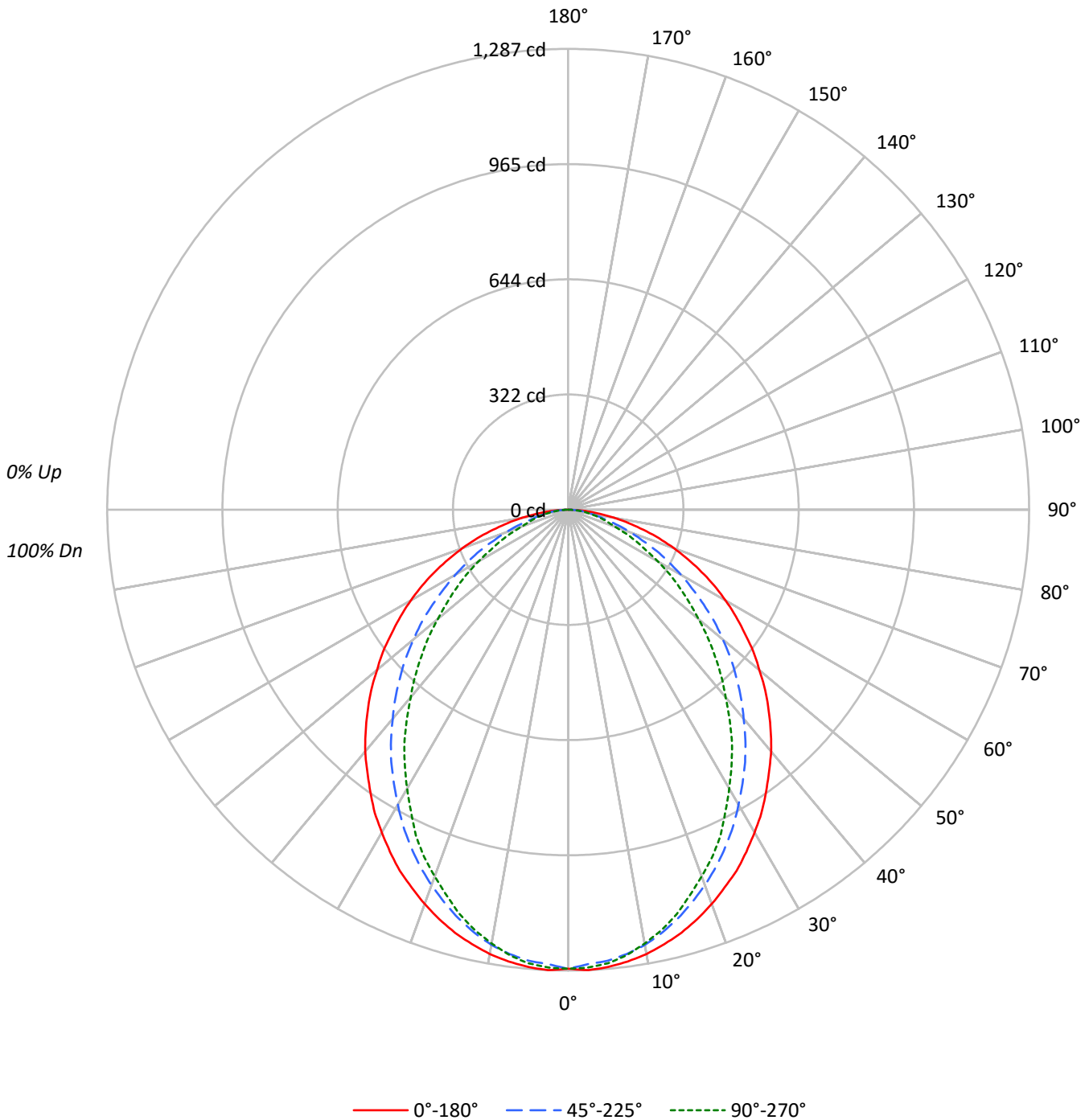
Input Watts (W): 34.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88					86				
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75					73				
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64					62				
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56					54				
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49					47				
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44					42				
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39					37				
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35					34				
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32					30				
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29					28				

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

	0°	45°	90°
0°	13799	13799	13799
5°	13852	13661	13740
10°	13773	13489	13444
15°	13625	13173	13035
20°	13423	12779	12481
25°	13213	12336	11941
30°	12935	11824	11177
35°	12651	11312	10479
40°	12389	10708	9612
45°	12044	10114	8832
50°	11665	9436	7956
55°	11279	8663	7141
60°	10923	7834	6245
65°	10460	6938	5349
70°	9882	5825	4318
75°	9037	4583	4063
80°	8058	4060	3738
85°	6805	3594	3335



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.5	4.2
10°-20°	335.2	11.6
20°-30°	482.7	16.7
30°-40°	543.6	18.8
40°-50°	520.0	18.0
50°-60°	425.6	14.7
60°-70°	287.0	9.9
70°-80°	143.9	5.0
80°-90°	37.6	1.3
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°	938.5	32.4
0°-40°	1482.0	51.2
0°-60°	2427.6	83.8
0°-90°	2896.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2896.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1282	1282	1282	1282	1282	
5°	1282	1277	1264	1274	1272	122
15°	1223	1211	1182	1177	1170	345
25°	1112	1086	1039	1017	1005	512
35°	963	925	861	816	798	603
45°	791	744	664	605	580	611
55°	601	550	462	401	380	539
65°	411	354	272	222	210	406
75°	217	167	110	100	98	232
85°	55	32	29	27	27	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1282.0	1282.0	1282.0	1282.0	1282.0
2.5°	1287.2	1283.0	1270.5	1282.0	1279.9
5°	1282.0	1276.8	1264.3	1273.6	1271.6
7.5°	1272.6	1267.4	1251.8	1258.0	1254.9
10°	1260.1	1252.8	1234.1	1235.2	1230.0
12.5°	1242.5	1234.1	1210.2	1209.2	1202.9
15°	1222.7	1211.3	1182.1	1177.0	1169.7
17.5°	1198.8	1186.3	1149.9	1139.5	1129.1
20°	1171.8	1155.1	1115.6	1102.1	1089.6
22.5°	1141.6	1121.8	1079.2	1061.5	1050.1
25°	1112.5	1086.5	1038.7	1016.8	1005.4
27.5°	1077.1	1049.1	997.1	968.0	950.3
30°	1040.7	1009.6	951.3	916.0	899.3
32.5°	1004.4	968.0	905.6	866.1	848.4
35°	962.8	925.3	860.9	816.2	797.5
37.5°	921.2	880.6	813.1	763.1	740.3
40°	881.7	835.9	762.1	708.0	684.1
42.5°	837.0	791.2	714.3	654.0	633.2
45°	791.2	744.4	664.4	605.1	580.2
47.5°	746.5	694.5	615.5	551.0	529.2
50°	696.6	647.7	563.5	499.1	475.1
52.5°	651.9	597.8	514.7	447.1	426.3
55°	601.0	550.0	461.6	401.3	380.5
57.5°	555.2	500.1	410.7	353.5	335.8
60°	507.4	450.2	363.9	307.8	290.1
62.5°	459.6	402.4	316.1	264.1	245.4
65°	410.7	353.5	272.4	221.5	210.0
67.5°	361.8	303.6	224.6	186.1	173.6
70°	314.0	257.8	185.1	148.7	137.2
72.5°	266.2	211.1	146.6	118.5	115.4
75°	217.3	167.4	110.2	99.8	97.7
77.5°	172.6	126.8	86.3	80.1	78.0
80°	130.0	87.3	65.5	62.4	60.3
82.5°	89.4	54.1	46.8	43.7	43.7
85°	55.1	32.2	29.1	27.0	27.0
87.5°	25.0	13.5	13.5	12.5	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)