

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: P242547

Luminaire Tested: **S123RDR-S1000D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242547
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: S123RDR-S1000D930-X4F0-XX-UDD-F-W
Description: DEFINE 3 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 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 0.23' x L: 3.88' x H: 0')
CIE Type: Direct

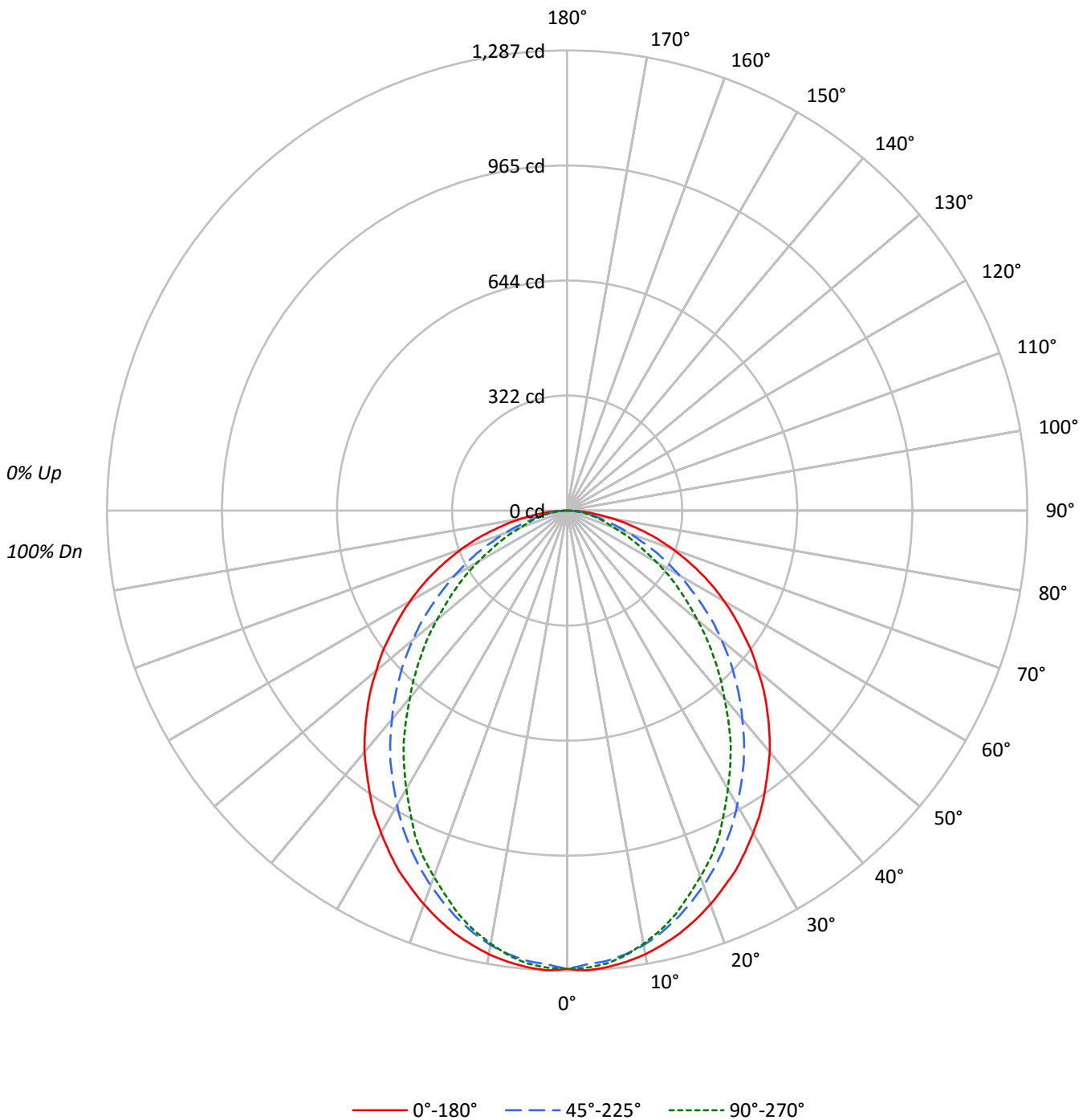
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15539	15539	15539
5°	15599	15383	15472
10°	15510	15190	15139
15°	15343	14834	14678
20°	15115	14390	14055
25°	14879	13892	13447
30°	14566	13315	12587
35°	14247	12739	11801
40°	13951	12059	10825
45°	13563	11389	9946
50°	13136	10626	8959
55°	12701	9755	8041
60°	12301	8822	7033
65°	11779	7813	6023
70°	11128	6560	4862
75°	10177	5161	4576
80°	9074	4572	4209
85°	7663	4047	3755



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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)