

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: P242454

Luminaire Tested: **S123DR-S1000D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DR-S1000D940-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3441.9 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')
CIE Type: Direct

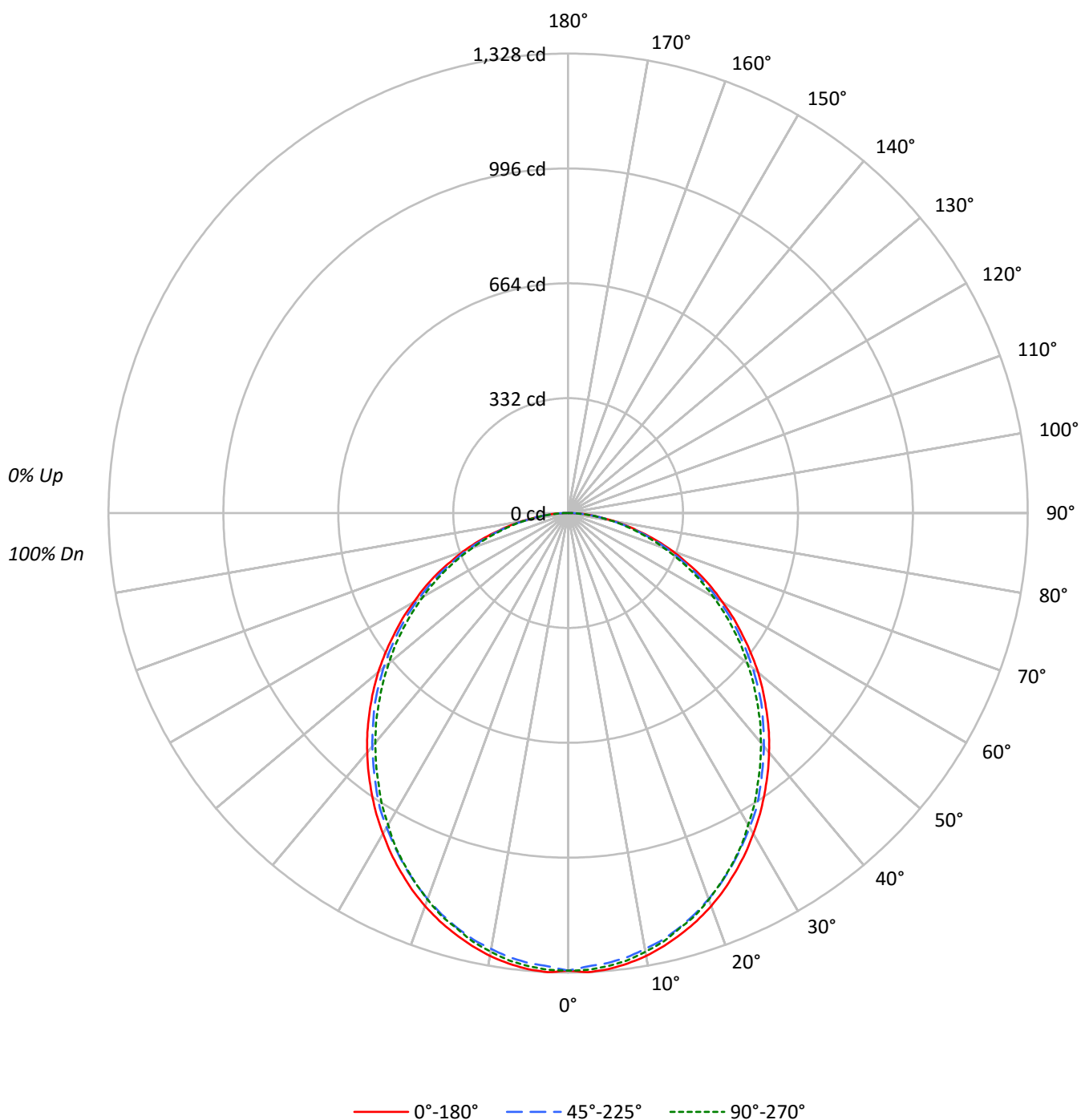
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	100	96	106	102	98	95		98	94	92		94	91	89		90	88	86
2	99	91	84	79	97	89	83	78		86	80	76		82	78	74		79	76	72
3	91	80	72	66	88	79	71	65		76	69	64		73	67	63		70	66	62
4	83	71	62	56	81	70	62	55		67	60	55		65	59	54		63	58	53
5	76	64	55	48	74	63	54	48		60	53	47		58	52	47		57	51	46
6	71	57	49	42	69	56	48	42		55	47	42		53	46	41		51	46	41
7	66	52	43	37	64	51	43	37		50	42	37		48	42	37		47	41	36
8	61	48	39	33	60	47	39	33		46	38	33		44	38	33		43	37	33
9	57	44	36	30	56	43	35	30		42	35	30		41	34	30		40	34	30
10	54	40	33	27	52	40	32	27		39	32	27		38	32	27		37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16030	16030	16030
5°	16105	15883	15994
10°	15998	15746	15844
15°	15812	15568	15597
20°	15592	15314	15328
25°	15300	15011	14981
30°	14978	14675	14563
35°	14639	14319	14134
40°	14287	13928	13711
45°	13899	13568	13235
50°	13509	13123	12759
55°	13001	12665	12280
60°	12487	12128	11743
65°	12035	11547	11186
70°	11366	10880	10398
75°	10383	10013	9587
80°	9368	8970	8893
85°	8219	7913	7594

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.7	3.6
10°-20°	352.0	10.2
20°-30°	519.9	15.1
30°-40°	607.2	17.6
40°-50°	610.5	17.7
50°-60°	536.3	15.6
60°-70°	399.4	11.6
70°-80°	227.3	6.6
80°-90°	64.6	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°	996.7	29.0
0°-40°	1603.9	46.6
0°-60°	2750.6	79.9
0°-90°	3441.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3441.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1322	1322	1322	1322	1322	
5°	1324	1318	1305	1317	1314	126
15°	1260	1255	1241	1250	1243	355
25°	1144	1137	1122	1124	1120	527
35°	989	982	968	961	955	619
45°	811	806	792	778	772	626
55°	615	614	599	587	581	551
65°	420	414	403	394	390	414
75°	222	217	214	208	205	237
85°	59	57	57	55	55	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1328.2	1323.6	1311.1	1322.5	1321.4
5°	1323.6	1318.0	1305.4	1316.8	1314.5
7.5°	1313.4	1307.7	1295.2	1305.4	1304.3
10°	1299.8	1294.1	1279.3	1289.5	1287.3
12.5°	1281.6	1277.0	1263.4	1270.2	1269.1
15°	1260.0	1255.4	1240.6	1249.7	1242.9
17.5°	1236.1	1230.4	1215.6	1222.4	1220.2
20°	1208.8	1202.0	1187.2	1191.7	1188.3
22.5°	1178.1	1171.3	1156.5	1159.9	1155.3
25°	1144.0	1137.1	1122.4	1123.5	1120.1
27.5°	1108.7	1101.9	1086.0	1087.1	1083.7
30°	1070.1	1064.4	1048.5	1048.5	1040.5
32.5°	1031.4	1023.4	1012.1	1004.1	1000.7
35°	989.3	982.5	967.7	960.9	955.2
37.5°	947.2	938.1	923.4	915.4	912.0
40°	902.9	896.1	880.2	871.1	866.5
42.5°	858.5	850.6	834.7	825.6	821.0
45°	810.8	806.2	791.5	777.8	772.1
47.5°	764.2	757.3	743.7	730.0	725.5
50°	716.4	710.7	695.9	683.4	676.6
52.5°	666.4	663.0	647.0	636.8	630.0
55°	615.2	614.1	599.3	586.8	581.1
57.5°	567.4	562.9	551.5	540.1	533.3
60°	515.1	514.0	500.3	490.1	484.4
62.5°	468.5	465.1	451.4	441.2	437.8
65°	419.6	413.9	402.6	393.5	390.0
67.5°	367.3	362.8	353.7	345.7	341.1
70°	320.7	313.9	307.0	299.1	293.4
72.5°	271.8	267.2	259.3	252.4	250.2
75°	221.7	217.2	213.8	208.1	204.7
77.5°	177.4	175.1	170.6	166.0	166.0
80°	134.2	130.8	128.5	127.4	127.4
82.5°	92.1	92.1	92.1	89.8	88.7
85°	59.1	56.9	56.9	54.6	54.6
87.5°	29.6	26.2	25.0	23.9	23.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)