

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: P242449

Luminaire Tested: **S123DR-S1000D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242449
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-S1000D935-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3323.4 lumens
Efficiency: N/A
Efficacy: 95.5 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

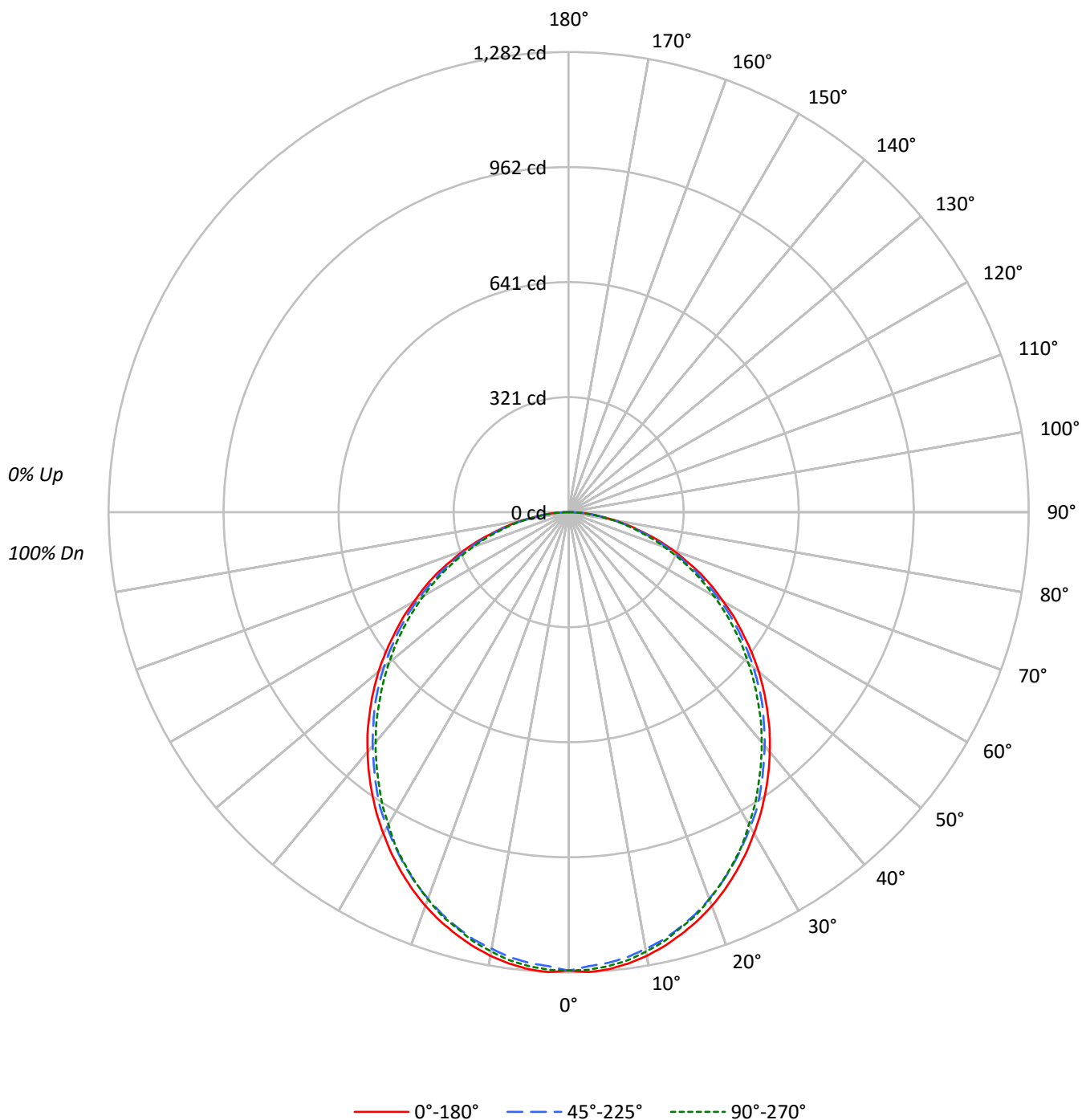
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	15479	15479	15479
5°	15551	15337	15444
10°	15447	15203	15298
15°	15267	15032	15060
20°	15056	14786	14800
25°	14773	14494	14464
30°	14461	14169	14062
35°	14134	13827	13648
40°	13795	13446	13239
45°	13420	13100	12779
50°	13044	12672	12319
55°	12553	12227	11858
60°	12058	11712	11338
65°	11622	11148	10801
70°	10972	10508	10040
75°	10027	9666	9254
80°	9047	8663	8586
85°	7941	7635	7329

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.4	3.6
10°-20°	339.9	10.2
20°-30°	502.0	15.1
30°-40°	586.3	17.6
40°-50°	589.4	17.7
50°-60°	517.8	15.6
60°-70°	385.6	11.6
70°-80°	219.5	6.6
80°-90°	62.4	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°	962.3	29.0
0°-40°	1548.7	46.6
0°-60°	2655.9	79.9
0°-90°	3323.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3323.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1277	1277	1277	1277	1277	
5°	1278	1273	1260	1272	1269	121
15°	1217	1212	1198	1207	1200	343
25°	1105	1098	1084	1085	1082	509
35°	955	949	934	928	922	598
45°	783	778	764	751	746	604
55°	594	593	579	567	561	532
65°	405	400	389	380	377	400
75°	214	210	206	201	198	229
85°	57	55	55	53	53	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1277.0	1277.0	1277.0	1277.0	1277.0
2.5°	1282.4	1278.1	1266.0	1277.0	1275.9
5°	1278.1	1272.6	1260.5	1271.5	1269.3
7.5°	1268.2	1262.7	1250.6	1260.5	1259.4
10°	1255.0	1249.5	1235.2	1245.1	1242.9
12.5°	1237.4	1233.0	1219.9	1226.5	1225.4
15°	1216.6	1212.2	1197.9	1206.7	1200.1
17.5°	1193.5	1188.0	1173.7	1180.3	1178.1
20°	1167.2	1160.6	1146.3	1150.7	1147.4
22.5°	1137.5	1130.9	1116.7	1119.9	1115.6
25°	1104.6	1098.0	1083.7	1084.8	1081.5
27.5°	1070.5	1063.9	1048.6	1049.7	1046.4
30°	1033.2	1027.7	1012.3	1012.3	1004.7
32.5°	995.9	988.2	977.2	969.5	966.2
35°	955.2	948.7	934.4	927.8	922.3
37.5°	914.6	905.8	891.6	883.9	880.6
40°	871.8	865.2	849.8	841.1	836.7
42.5°	829.0	821.3	805.9	797.1	792.7
45°	782.9	778.5	764.2	751.0	745.5
47.5°	737.8	731.3	718.1	704.9	700.5
50°	691.7	686.2	672.0	659.9	653.3
52.5°	643.4	640.1	624.8	614.9	608.3
55°	594.0	592.9	578.6	566.6	561.1
57.5°	547.9	543.5	532.5	521.5	515.0
60°	497.4	496.3	483.1	473.2	467.7
62.5°	452.4	449.1	435.9	426.0	422.7
65°	405.2	399.7	388.7	379.9	376.6
67.5°	354.6	350.3	341.5	333.8	329.4
70°	309.6	303.0	296.5	288.8	283.3
72.5°	262.4	258.0	250.3	243.8	241.6
75°	214.1	209.7	206.4	200.9	197.6
77.5°	171.3	169.1	164.7	160.3	160.3
80°	129.6	126.3	124.1	123.0	123.0
82.5°	88.9	88.9	88.9	86.7	85.6
85°	57.1	54.9	54.9	52.7	52.7
87.5°	28.5	25.3	24.2	23.1	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)