

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: P242453

Luminaire Tested: **S123DR-S775D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242453
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-S775D940-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: 2699.0 lumens
Efficiency: N/A
Efficacy: 102.2 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

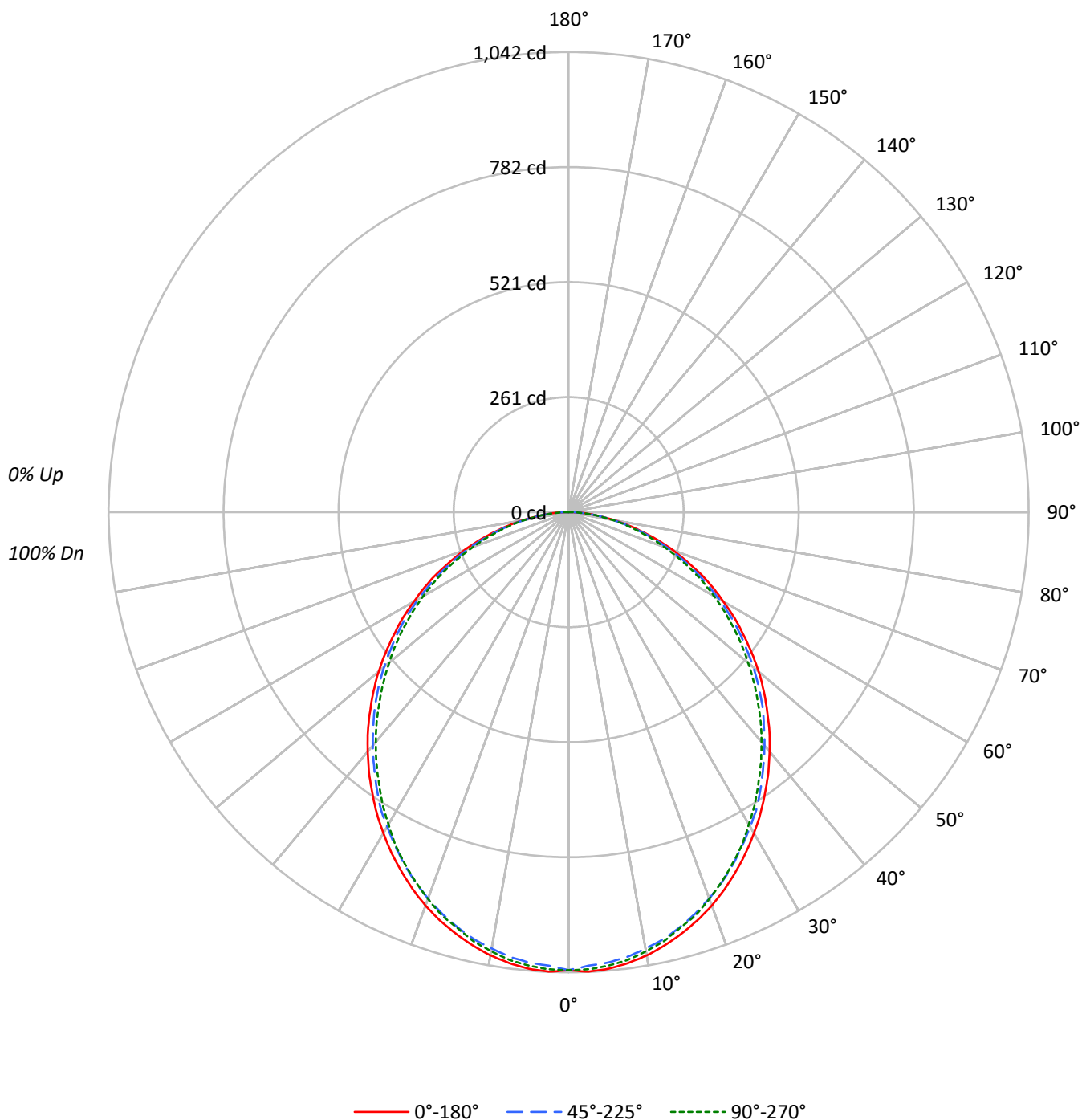
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	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	100		
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84		
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70		
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44		
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39		
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34		
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31		
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28		
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12571	12571	12571
5°	12630	12456	12542
10°	12545	12348	12424
15°	12398	12209	12230
20°	12227	12008	12019
25°	11998	11771	11747
30°	11744	11508	11420
35°	11480	11228	11083
40°	11203	10921	10752
45°	10899	10638	10379
50°	10594	10290	10006
55°	10194	9930	9630
60°	9792	9513	9210
65°	9436	9055	8774
70°	8913	8534	8155
75°	8144	7849	7517
80°	7343	7036	6973
85°	6453	6203	5952

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	3.6
10°-20°	276.1	10.2
20°-30°	407.7	15.1
30°-40°	476.2	17.6
40°-50°	478.7	17.7
50°-60°	420.5	15.6
60°-70°	313.2	11.6
70°-80°	178.2	6.6
80°-90°	50.7	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°	781.5	29.0
0°-40°	1257.7	46.6
0°-60°	2156.9	79.9
0°-90°	2699.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2699.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1037	1037	1037	1037	1037	
5°	1038	1034	1024	1033	1031	98
15°	988	984	973	980	975	279
25°	897	892	880	881	878	413
35°	776	770	759	754	749	485
45°	636	632	621	610	606	491
55°	482	482	470	460	456	432
65°	329	325	316	308	306	325
75°	174	170	168	163	160	186
85°	46	45	45	43	43	53
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1037.1	1037.1	1037.1	1037.1	1037.1
2.5°	1041.5	1038.0	1028.1	1037.1	1036.2
5°	1038.0	1033.5	1023.7	1032.6	1030.8
7.5°	1029.9	1025.5	1015.7	1023.7	1022.8
10°	1019.2	1014.8	1003.2	1011.2	1009.4
12.5°	1005.0	1001.4	990.7	996.0	995.1
15°	988.0	984.4	972.9	980.0	974.6
17.5°	969.3	964.8	953.2	958.6	956.8
20°	947.9	942.5	930.9	934.5	931.8
22.5°	923.8	918.5	906.9	909.5	906.0
25°	897.1	891.7	880.1	881.0	878.3
27.5°	869.4	864.1	851.6	852.5	849.8
30°	839.1	834.6	822.2	822.2	815.9
32.5°	808.8	802.5	793.6	787.4	784.7
35°	775.8	770.4	758.8	753.5	749.0
37.5°	742.8	735.7	724.1	717.8	715.2
40°	708.0	702.7	690.2	683.0	679.5
42.5°	673.2	667.0	654.5	647.4	643.8
45°	635.8	632.2	620.6	609.9	605.5
47.5°	599.2	593.9	583.2	572.5	568.9
50°	561.8	557.3	545.7	535.9	530.6
52.5°	522.5	519.9	507.4	499.4	494.0
55°	482.4	481.5	469.9	460.1	455.7
57.5°	445.0	441.4	432.5	423.6	418.2
60°	403.9	403.1	392.4	384.3	379.9
62.5°	367.4	364.7	354.0	346.0	343.3
65°	329.0	324.6	315.7	308.5	305.9
67.5°	288.0	284.5	277.3	271.1	267.5
70°	251.5	246.1	240.8	234.5	230.1
72.5°	213.1	209.6	203.3	198.0	196.2
75°	173.9	170.3	167.6	163.2	160.5
77.5°	139.1	137.3	133.8	130.2	130.2
80°	105.2	102.5	100.8	99.9	99.9
82.5°	72.2	72.2	72.2	70.4	69.6
85°	46.4	44.6	44.6	42.8	42.8
87.5°	23.2	20.5	19.6	18.7	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)