

Scaled data based on original data using
LM-66-11 Electrical and Photometric Measurements of Single-Ended Compact
Fluorescent Lamps

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: SHAPER

Report Number: ITL38168

Luminaire Tested: **432-32-CF4/39**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: ITL38168
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 432-32-CF4/39
Description: DISH PENDANT W/ DIFFUSER
Light Source: 4-CF39TT/11, 400LUMENS
Ballast/Driver: -

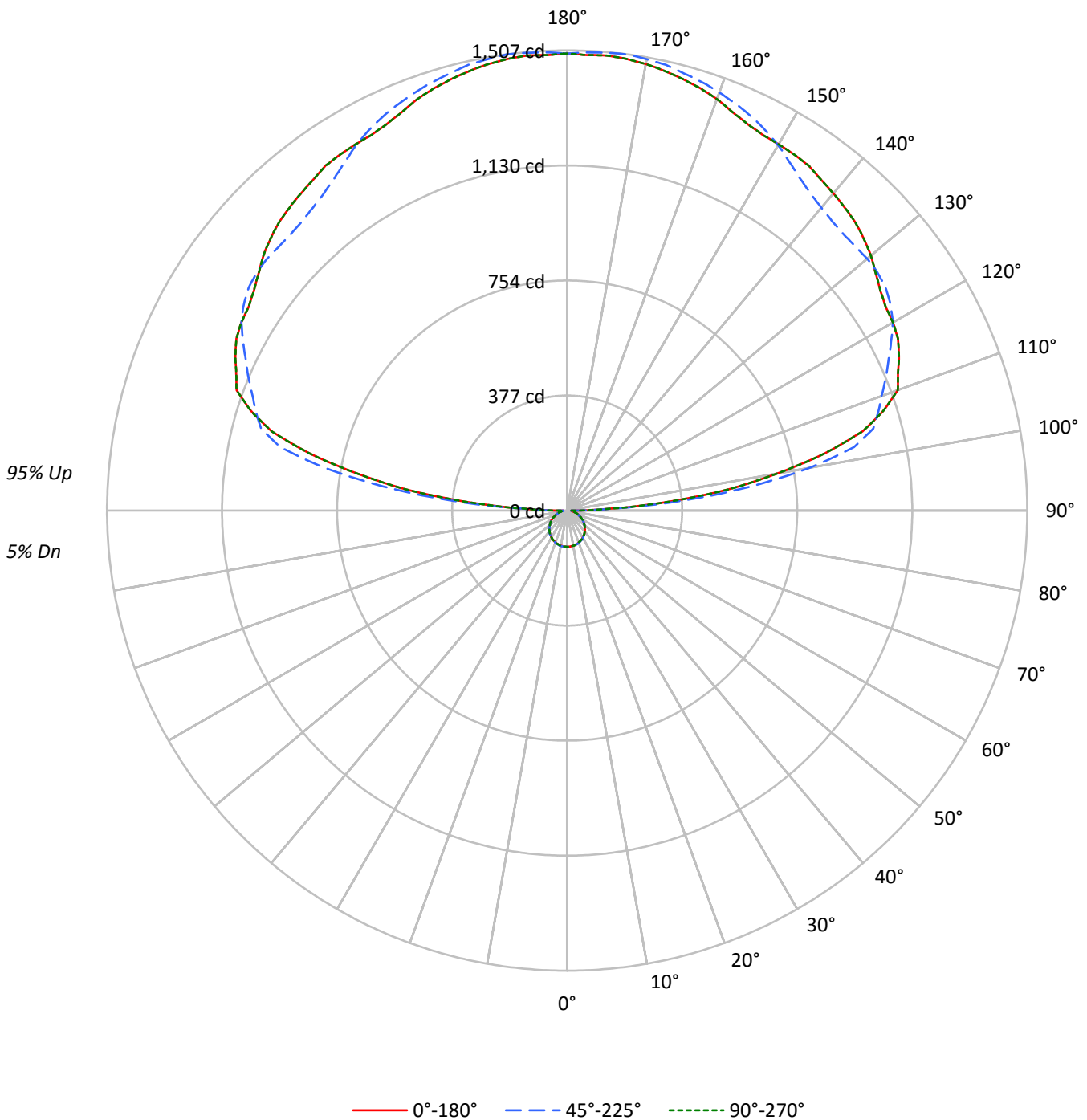
Summary

Lumens per Lamp: 2850 (4 lamps)
Luminaire Lumens: 7154.5 lumens
Efficiency: 62.8%
Efficacy: 39.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: (L: 0 ' x W: -2.66 ' x H: 0 '
CIE Type: Indirect

Input Watts (W): 180.8
Input Voltage (V): NR
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	61	61	61	61	52	52	52	52	37	37	37	22	22	22	9	9	9	3		
1	55	52	50	48	47	45	43	42	32	31	30	20	19	18	8	8	8	3		
2	50	46	42	39	43	40	37	34	28	26	24	17	16	15	7	7	6	2		
3	46	40	36	32	39	35	31	28	24	22	20	15	14	13	6	6	5	2		
4	42	35	31	27	36	31	27	24	22	19	17	13	12	11	6	5	5	2		
5	38	31	27	23	33	27	23	20	19	17	15	12	10	9	5	4	4	1		
6	35	28	23	20	30	24	20	17	17	15	13	11	9	8	4	4	3	1		
7	32	25	20	17	28	22	18	15	15	13	11	10	8	7	4	3	3	1		
8	30	22	18	15	25	20	16	13	14	11	10	9	7	6	4	3	3	1		
9	27	20	16	13	24	18	14	11	13	10	8	8	6	5	3	3	2	1		
10	25	18	14	11	22	16	13	10	11	9	7	7	6	5	3	3	2	1		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	Luminous shape not found,		
5°	reference photometric report, or contact		
10°	the photometric lab for calculations.		
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	11.3	0.2	0.1
10°-20°	32.4	0.5	0.3
20°-30°	49.7	0.7	0.4
30°-40°	60.7	0.8	0.5
40°-50°	63.7	0.9	0.6
50°-60°	59.3	0.8	0.5
60°-70°	47.1	0.7	0.4
70°-80°	31.1	0.4	0.3
80°-90°	17.2	0.2	0.2
90°-100°	395.3	5.5	3.5
100°-110°	1030.9	14.4	9.0
110°-120°	1149.0	16.1	10.1
120°-130°	1113.1	15.6	9.8
130°-140°	1021.8	14.3	9.0
140°-150°	857.4	12.0	7.5
150°-160°	653.9	9.1	5.7
160°-170°	417.5	5.8	3.7
170°-180°	143.1	2.0	1.3
0°-30°	93.3	1.3	0.8
0°-40°	154.1	2.2	1.4
0°-60°	277.1	3.9	2.4
0°-90°	372.5	5.2	3.3
90°-120°	2575.2	36.0	22.6
90°-150°	5567.5	77.8	48.8
90°-180°	6782.0	94.8	59.5
0°-180°	7154.5	100.0	62.8

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	119	119	119	119	119	
5°	118	118	119	118	118	11
15°	114	115	115	115	114	32
25°	107	108	108	108	107	49
35°	97	97	97	97	97	60
45°	82	83	82	83	82	63
55°	66	67	66	67	66	59
65°	47	48	46	48	47	47
75°	29	30	29	30	29	31
85°	15	16	15	16	15	14
90°	13	10	14	10	13	25
95°	337	360	391	360	337	351
105°	1001	998	1038	998	1001	1023
115°	1199	1140	1161	1140	1199	1187
125°	1253	1217	1273	1217	1253	1128
135°	1335	1337	1280	1337	1335	1031
145°	1379	1378	1329	1378	1379	863
155°	1397	1416	1425	1416	1397	648
165°	1463	1479	1482	1479	1463	414
175°	1496	1503	1505	1503	1496	142
180°	1497	1497	1497	1497	1497	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	119	119	119	119	119
2.5°	118	119	119	119	118
5°	118	118	119	118	118
7.5°	117	118	118	118	117
10°	117	117	118	117	117
12.5°	116	116	117	116	116
15°	114	115	115	115	114
17.5°	113	113	114	113	113
20°	111	111	112	111	111
22.5°	109	110	110	110	109
25°	107	108	108	108	107
27.5°	105	106	106	106	105
30°	102	103	103	103	102
32.5°	99	100	100	100	99
35°	97	97	97	97	97
37.5°	93	95	94	95	93
40°	90	91	90	91	90
42.5°	86	87	86	87	86
45°	82	83	82	83	82
47.5°	78	79	78	79	78
50°	74	75	74	75	74
52.5°	70	71	70	71	70
55°	66	67	66	67	66
57.5°	62	63	61	63	62
60°	57	58	57	58	57
62.5°	52	53	52	53	52
65°	47	48	46	48	47
67.5°	42	43	42	43	42
70°	38	39	37	39	38
72.5°	34	34	33	34	34
75°	29	30	29	30	29
77.5°	25	25	24	25	25
80°	22	22	21	22	22
82.5°	18	18	17	18	18
85°	15	16	15	16	15
87.5°	13	13	13	13	13
90°	13	10	14	10	13
92.5°	145	147	151	147	145
95°	337	360	391	360	337
97.5°	531	568	608	568	531
100°	700	721	808	721	700
102.5°	863	883	962	883	863
105°	1001	998	1038	998	1001
107.5°	1086	1066	1068	1066	1086
110°	1152	1101	1096	1101	1152



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1173	1119	1129	1119	1173
115°	1199	1140	1161	1140	1199
117.5°	1221	1154	1196	1154	1221
120°	1232	1168	1232	1168	1232
122.5°	1238	1187	1256	1187	1238
125°	1253	1217	1273	1217	1253
127.5°	1274	1252	1281	1252	1274
130°	1299	1287	1283	1287	1299
132.5°	1318	1315	1280	1315	1318
135°	1335	1337	1280	1337	1335
137.5°	1346	1353	1285	1353	1346
140°	1356	1365	1295	1365	1356
142.5°	1366	1373	1309	1373	1366
145°	1379	1378	1329	1378	1379
147.5°	1383	1383	1354	1383	1383
150°	1385	1388	1382	1388	1385
152.5°	1387	1397	1405	1397	1387
155°	1397	1416	1425	1416	1397
157.5°	1413	1435	1442	1435	1413
160°	1434	1454	1457	1454	1434
162.5°	1450	1470	1471	1470	1450
165°	1463	1479	1482	1479	1463
167.5°	1475	1489	1495	1489	1475
170°	1485	1498	1501	1498	1485
172.5°	1492	1502	1507	1502	1492
175°	1496	1503	1505	1503	1496
177.5°	1493	1500	1502	1500	1493
180°	1497	1497	1497	1497	1497

(END OF REPORT)