

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: 253P306

Luminaire Tested: **307-30-CFL/4/26-120V-30**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 253P306
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 307-30-CFL/4/26-120V-30
Description: SHAPER CLASSIC 307 30" GLASS PENDANT WITH FOUR 26W COMPACT
FLUORESCENT LAMPS
Light Source: FOUR - CF26TTT/841 - 1800 LUMENS - 26 WATTS
Ballast/Driver: (2) C2642UNVSE
PRORATED FROM 253P306

Summary

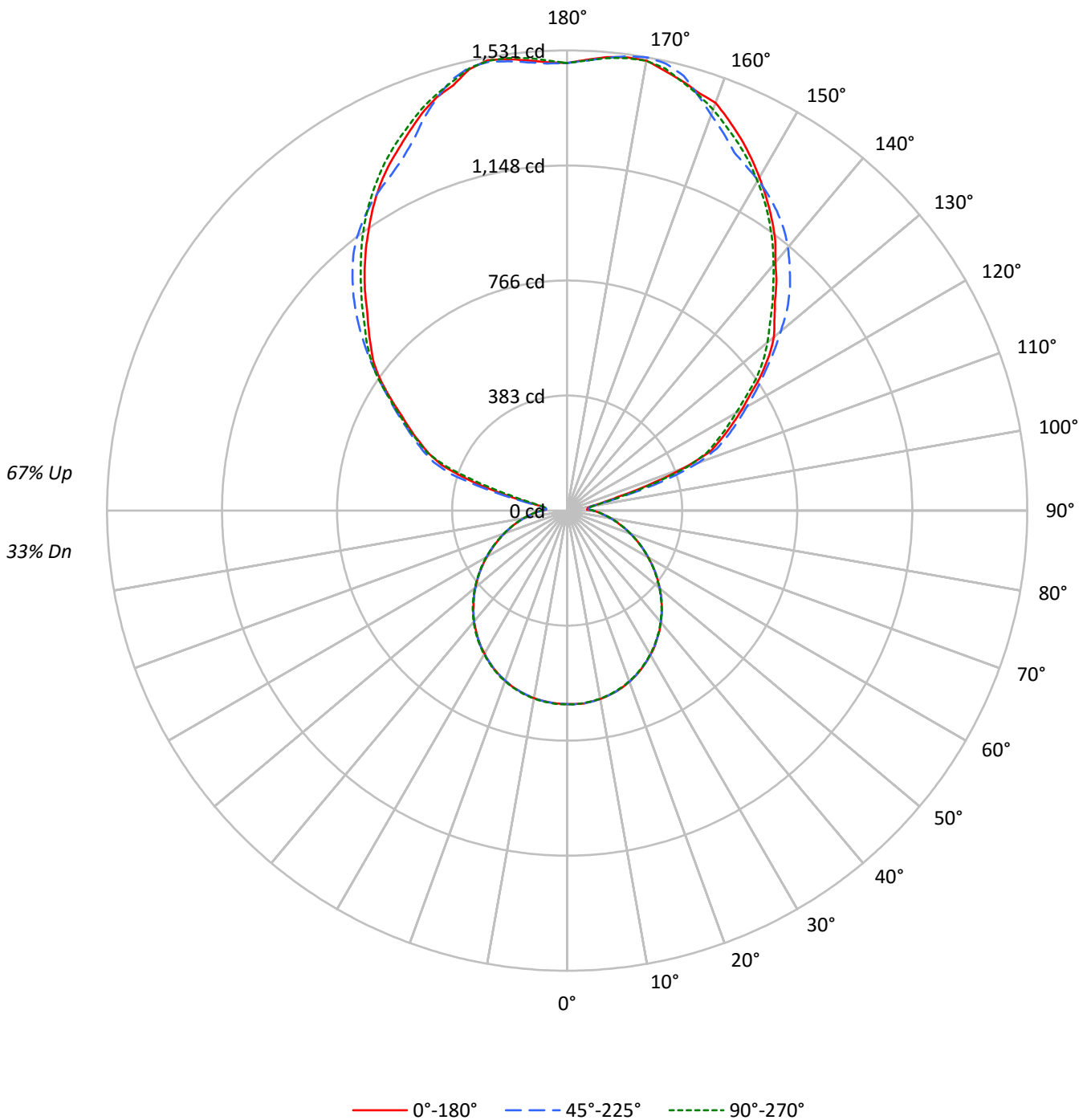
Lumens per Lamp: 1800 (4 lamps)
Luminaire Lumens: 6344.5 lumens
Efficiency: 88.1%
Efficacy: 6344.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Vertical Cylinder (Dia: 2.5' x H: 0.6')
CIE Type: Semi-Indirect

Input Watts (W): 1
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

TEST NUMBER: 253P306

CATALOG NUMBER: 307-30-CFL/4/26-120V-30

Luminous Intensity Polar Plot





TEST NUMBER: 253P306

CATALOG NUMBER: 307-30-CFL/4/26-120V-30

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	0
RCR																				
0	91	91	91	91	82	82	82	82	65	65	65		50	50	50		35	35	35	29
1	82	78	74	71	74	70	67	65	56	54	52		43	41	40		30	29	29	23
2	74	68	62	58	67	61	56	52	49	45	42		37	35	33		26	25	24	19
3	68	59	53	48	61	53	48	43	43	39	35		32	30	27		23	21	20	15
4	62	52	45	40	55	47	41	37	38	33	30		29	26	23		20	18	17	13
5	57	46	39	34	51	42	36	31	33	29	25		26	22	20		18	16	15	11
6	52	41	34	29	47	37	31	27	30	25	22		23	20	17		17	14	13	10
7	48	37	30	25	43	34	28	23	27	23	19		21	18	15		15	13	11	9
8	44	34	27	22	40	31	25	20	25	20	17		19	16	13		14	12	10	8
9	41	31	24	20	37	28	22	18	22	18	15		17	14	12		13	11	9	7
10	38	28	22	18	35	25	20	16	21	16	13		16	13	11		12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	1412	1412	1412
5°	1381	1377	1374
10°	1345	1341	1339
15°	1309	1305	1302
20°	1271	1268	1264
25°	1233	1229	1225
30°	1191	1187	1183
35°	1149	1146	1140
40°	1104	1100	1096
45°	1056	1052	1045
50°	1003	1000	994
55°	949	946	940
60°	892	890	882
65°	836	834	827
70°	778	778	770
75°	724	726	719
80°	679	682	674
85°	635	641	635



TEST NUMBER: 253P306

CATALOG NUMBER: 307-30-CFL/4/26-120V-30

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	61.1	1.0	0.8
10°-20°	175.6	2.8	2.4
20°-30°	267.6	4.2	3.7
30°-40°	325.3	5.1	4.5
40°-50°	342.0	5.4	4.8
50°-60°	318.5	5.0	4.4
60°-70°	264.2	4.2	3.7
70°-80°	194.3	3.1	2.7
80°-90°	124.9	2.0	1.7
90°-100°	82.7	1.3	1.1
100°-110°	258.7	4.1	3.6
110°-120°	556.4	8.8	7.7
120°-130°	697.7	11.0	9.7
130°-140°	765.5	12.1	10.6
140°-150°	734.2	11.6	10.2
150°-160°	614.3	9.7	8.5
160°-170°	417.0	6.6	5.8
170°-180°	144.4	2.3	2.0
0°-30°	504.3	7.9	7.0
0°-40°	829.6	13.1	11.5
0°-60°	1490.1	23.5	20.7
0°-90°	2073.6	32.7	28.8
90°-120°	897.7	14.1	12.5
90°-150°	3095.2	48.8	43.0
90°-180°	4271.0	67.3	59.3
0°-180°	6344.5	100.0	88.1

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	644	644	644	644	644	
5°	644	644	642	641	641	61
15°	624	624	622	621	621	176
25°	582	582	581	579	579	269
35°	522	522	520	518	518	327
45°	445	445	444	441	441	344
55°	357	358	356	354	354	320
65°	267	268	267	266	264	265
75°	184	184	184	182	182	195
85°	114	113	115	112	114	100
90°	86	85	87	84	86	46
95°	68	73	74	72	70	57
105°	173	223	197	286	244	215
115°	568	590	550	559	543	555
125°	789	803	769	764	758	703
135°	977	1048	965	1005	940	759
145°	1186	1216	1173	1182	1149	741
155°	1367	1315	1348	1293	1328	629
165°	1480	1497	1477	1484	1464	418
175°	1514	1512	1511	1497	1503	145
180°	1489	1489	1489	1489	1489	



TEST NUMBER: 253P306

CATALOG NUMBER: 307-30-CFL/4/26-120V-30

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	644.1	644.1	644.1	644.1	644.1	644.1	644.1	644.1	644.1
2.5°	644.1	644.7	644.7	644.7	644.7	642.4	642.4	642.4	643.0
5°	644.1	643.5	643.5	643.5	642.4	641.8	641.2	641.8	641.2
7.5°	640.1	640.7	640.7	640.1	639.5	638.4	638.4	638.4	637.8
10°	636.7	636.1	636.1	636.1	635.0	634.4	633.3	633.8	633.8
12.5°	630.4	630.4	630.4	630.4	629.3	628.1	627.6	628.1	628.1
15°	624.2	623.6	623.6	623.0	622.4	621.3	620.7	620.7	620.7
17.5°	615.6	615.0	615.0	615.0	613.9	612.8	612.2	612.2	612.8
20°	605.9	605.3	605.3	605.3	604.2	603.1	601.9	602.5	602.5
22.5°	595.1	594.5	594.5	594.5	593.4	591.7	591.1	591.1	591.7
25°	582.5	582.5	582.0	581.4	580.8	579.7	578.6	579.1	579.1
27.5°	568.9	568.9	568.3	567.7	567.2	565.4	564.9	564.9	564.9
30°	554.0	554.0	554.0	553.5	552.3	551.2	550.6	550.6	550.0
32.5°	539.2	538.6	538.1	537.5	536.9	535.8	535.2	534.7	534.7
35°	521.6	521.6	521.6	521.0	520.4	518.7	518.1	518.1	517.6
37.5°	504.4	503.9	503.9	503.3	502.2	501.0	500.5	499.9	499.3
40°	485.1	485.1	485.1	485.1	483.4	482.8	481.6	481.1	481.6
42.5°	465.7	465.1	465.1	465.1	464.0	462.3	461.7	461.7	461.7
45°	445.2	445.2	445.2	444.6	443.5	442.3	441.2	441.7	440.6
47.5°	424.6	424.1	424.1	422.9	422.4	421.2	420.7	420.1	420.1
50°	401.8	401.8	401.8	401.3	400.7	399.6	399.0	398.4	398.4
52.5°	379.6	379.6	380.2	379.6	378.5	377.3	376.8	376.2	376.2
55°	357.4	357.4	358.0	357.4	356.2	355.7	354.5	354.0	354.0
57.5°	334.6	335.2	335.2	334.6	333.4	332.9	332.3	331.7	331.2
60°	311.8	312.4	312.4	311.8	311.2	310.6	310.1	309.5	308.4
62.5°	289.0	289.0	290.1	289.6	288.4	287.8	287.8	286.7	286.1
65°	267.3	267.3	267.9	267.3	266.8	266.2	265.6	265.0	264.5
67.5°	245.7	245.7	245.7	245.7	245.1	244.5	243.4	243.4	242.8
70°	224.0	224.0	224.0	224.6	224.0	223.4	222.9	222.3	221.7
72.5°	204.1	203.5	203.5	204.1	204.1	202.9	201.8	201.8	201.8
75°	183.5	183.5	183.5	184.1	184.1	183.0	181.8	182.4	182.4
77.5°	165.3	164.7	164.2	165.3	165.9	164.2	163.0	163.6	163.6
80°	147.6	146.5	146.5	147.6	148.2	147.1	145.4	145.9	146.5
82.5°	130.0	129.4	128.8	130.0	131.1	129.4	127.7	128.8	129.4
85°	114.0	114.0	112.9	114.6	115.1	114.0	112.3	113.4	114.0
87.5°	99.7	98.6	98.6	99.7	100.3	99.2	97.5	98.6	99.7
90°	86.1	84.9	84.9	86.1	86.6	86.1	84.4	84.9	86.1
92.5°	66.7	69.0	73.0	75.2	74.7	73.0	71.8	70.1	69.5
95°	67.8	69.5	73.0	74.1	73.5	72.4	71.8	70.7	70.1
97.5°	69.5	71.2	74.1	74.7	74.7	73.5	72.4	72.4	74.1
100°	80.4	79.8	83.2	83.8	86.1	88.9	96.9	93.5	94.0
102.5°	115.7	124.3	123.7	133.4	122.5	144.2	171.0	164.7	144.2
105°	173.3	212.0	223.4	233.1	196.6	232.6	286.1	269.6	244.0
107.5°	282.7	322.6	354.0	344.3	307.8	335.2	404.7	373.9	349.4
110°	412.1	437.2	464.0	449.2	425.2	429.2	473.1	462.8	445.2



TEST NUMBER: 253P306

CATALOG NUMBER: 307-30-CFL/4/26-120V-30

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	517.0	523.3	538.6	522.1	503.3	490.2	518.7	516.4	498.7
115°	567.7	580.3	589.9	572.3	549.5	539.8	559.2	562.6	543.2
117.5°	617.3	634.4	639.0	625.3	597.9	591.7	604.8	607.6	590.5
120°	670.3	690.3	689.1	678.9	647.5	647.5	654.9	659.5	637.8
122.5°	724.5	749.6	746.1	737.0	704.5	706.2	707.4	716.5	697.7
125°	788.9	807.7	803.1	795.7	768.9	763.2	764.4	773.5	758.1
127.5°	847.6	864.1	865.8	847.6	822.5	817.4	827.6	825.9	812.2
130°	898.3	916.6	927.4	905.2	870.4	872.7	888.1	876.1	853.3
132.5°	935.4	961.0	993.5	961.0	913.7	926.8	947.3	921.7	896.0
135°	977.0	1012.3	1048.2	1007.2	965.0	977.6	1004.9	969.0	940.5
137.5°	1030.6	1052.2	1096.1	1049.4	1015.2	1022.6	1057.4	1014.0	995.8
140°	1077.9	1097.8	1143.4	1090.4	1068.2	1067.0	1107.5	1057.4	1048.2
142.5°	1137.1	1140.6	1183.3	1127.5	1122.3	1110.9	1148.0	1100.7	1099.5
145°	1186.2	1179.9	1216.4	1163.9	1173.1	1154.2	1181.6	1144.0	1149.1
147.5°	1233.5	1221.5	1245.4	1202.7	1221.5	1201.0	1212.4	1189.0	1200.4
150°	1279.6	1264.8	1270.0	1247.2	1266.5	1248.3	1238.6	1231.2	1247.2
152.5°	1324.1	1310.4	1291.0	1292.2	1309.3	1292.8	1262.6	1275.1	1289.9
155°	1366.9	1356.0	1315.0	1332.1	1348.0	1334.9	1293.3	1319.0	1327.5
157.5°	1405.6	1398.2	1358.9	1371.4	1382.8	1373.1	1334.9	1360.0	1367.4
160°	1443.8	1435.8	1401.1	1422.1	1420.4	1407.9	1390.8	1404.5	1408.5
162.5°	1456.9	1462.0	1448.4	1456.4	1450.6	1452.4	1439.8	1434.7	1442.1
165°	1479.7	1484.3	1497.4	1485.4	1476.9	1480.9	1483.7	1470.0	1464.3
167.5°	1498.5	1511.6	1523.0	1515.6	1506.5	1503.7	1509.4	1506.5	1504.2
170°	1520.2	1527.0	1531.0	1525.3	1519.0	1513.9	1515.6	1516.2	1521.3
172.5°	1520.8	1528.7	1524.7	1521.9	1518.5	1510.5	1507.6	1511.1	1515.1
175°	1514.5	1516.2	1511.6	1513.4	1511.1	1501.9	1496.8	1500.2	1503.1
177.5°	1501.4	1503.1	1498.5	1499.1	1499.1	1494.0	1488.8	1490.6	1492.8
180°	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8	1488.8

(END OF REPORT)