

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: SHAPER

Report Number: P34353

Luminaire Tested: **161-25-W-L3/835-UNV**

Test Date: 12/01/15

Test Information

Test Method: LM-79-08
Report Number: P34353
Test Lab: INNOVATION CENTER-P3
Test Date: 12/01/15
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 161-25-W-L3/835-UNV
Description: SHAPER 161 SERIES 25" FABRIQUE SQUARE CYLINDER WALL SCONCE LUMINAIRE.
Light Source: 12 CKTS 3500K LEDS
12499797
Ballast/Driver: (1) PHILIPS ELECTRONIC DRIVER
LEDINTA2000C24DOM

Summary

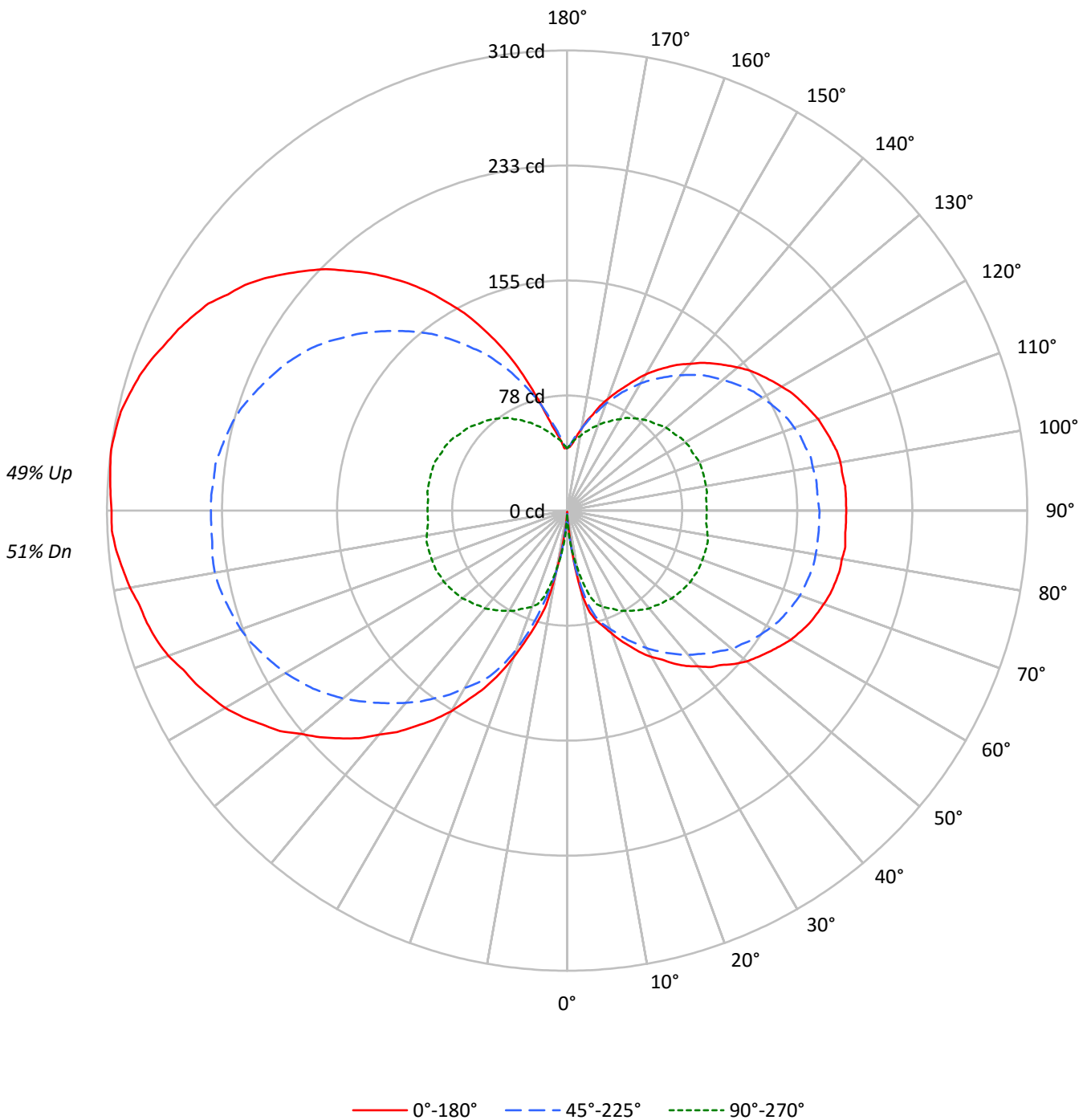
Lumens per Lamp: N/A
Luminaire Lumens: 1961.7 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 12.33 / 8.97 / 10.22
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 0.33' x H: 2.08')
CIE Type: General Diffuse

Input Watts (W): 22
Input Voltage (V): 120.0
Input Current (A_{in}): 0.185
Voltage Rise (V): NR
Power Factor: 0.9985
Total Harmonic Distortion (THDi): 6.81
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: HR
Ambient Temperature (°C): 25.0
Test Distance: 25 FT

TEST NUMBER: P34353

CATALOG NUMBER: 161-25-W-L3/835-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P34353

CATALOG NUMBER: 161-25-W-L3/835-UNV

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	107	107	107	107	99	99	99	99	84	84	84		70	70	70		57	57	57	51
1	93	86	80	75	85	79	74	69	65	61	58		53	50	47		42	39	37	32
2	82	72	64	57	75	66	58	52	54	48	44		43	39	35		34	30	27	22
3	74	62	52	45	67	56	48	41	46	40	34		37	32	27		28	24	21	16
4	67	53	44	36	60	49	40	33	40	33	28		32	26	22		24	20	17	13
5	61	47	37	30	55	43	34	28	35	28	23		28	22	18		21	17	14	10
6	55	41	32	25	50	38	29	23	31	24	19		25	19	15		19	15	11	8
7	51	37	28	22	46	34	26	20	28	21	16		22	17	13		17	13	10	7
8	47	33	25	19	43	30	23	17	25	19	14		20	15	11		15	11	8	6
9	44	30	22	16	40	28	20	15	23	17	12		18	13	10		14	10	7	5
10	41	27	19	14	37	25	18	13	21	15	11		17	12	8		13	9	6	4

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	97	97	97
5°	346	725	283
10°	1334	1237	959
15°	1444	1638	1462
20°	1385	1664	1653
25°	1379	1588	1802
30°	1384	1556	1893
35°	1386	1521	1947
40°	1387	1501	1995
45°	1389	1478	2050
50°	1409	1467	2087
55°	1412	1453	2135
60°	1425	1450	2179
65°	1432	1444	2196
70°	1434	1433	2229
75°	1439	1434	2254
80°	1439	1430	2288
85°	1442	1423	2340



TEST NUMBER: P34353

CATALOG NUMBER: 161-25-W-L3/835-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.4	0.1
10°-20°	19.7	1.0
20°-30°	46.9	2.4
30°-40°	80.2	4.1
40°-50°	114.9	5.9
50°-60°	148.6	7.6
60°-70°	177.1	9.0
70°-80°	196.7	10.0
80°-90°	204.7	10.4
90°-100°	204.4	10.4
100°-110°	194.2	9.9
110°-120°	172.7	8.8
120°-130°	143.6	7.3
130°-140°	110.1	5.6
140°-150°	76.0	3.9
150°-160°	44.6	2.3
160°-170°	19.9	1.0
170°-180°	4.8	0.2
0°-30°	69.0	3.5
0°-40°	149.2	7.6
0°-60°	412.8	21.0
0°-90°	991.3	50.5
90°-120°	571.4	29.1
90°-150°	901.1	45.9
90°-180°	970.0	49.4
0°-180°	1961.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2	2	2	2	2	
5°	11	17	19	14	9	3
15°	77	74	60	69	78	22
25°	101	96	73	123	132	47
35°	126	117	82	154	177	79
45°	147	136	89	183	217	115
55°	166	152	94	209	251	149
65°	180	163	97	227	276	178
75°	187	169	97	238	293	198
85°	188	170	94	240	305	154
90°	188	170	94	240	307	103
95°	188	169	94	239	309	153
105°	184	166	95	233	305	195
115°	174	158	93	218	289	173
125°	159	145	89	198	265	143
135°	140	129	83	171	230	109
145°	118	109	76	142	187	74
155°	92	88	66	110	136	43
165°	67	66	56	77	79	20
175°	46	48	47	49	47	5
180°	42	42	42	42	42	



TEST NUMBER: P34353

CATALOG NUMBER: 161-25-W-L3/835-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2	2	2	2	2	2	2	2	2
2.5°	1	3	6	8	8	7	5	2	1
5°	11	14	17	20	19	18	14	9	9
7.5°	35	33	33	32	29	29	27	24	22
10°	57	55	50	44	39	44	41	40	41
12.5°	70	69	64	56	50	58	54	50	65
15°	77	77	74	67	60	70	69	59	78
17.5°	82	83	80	72	66	79	85	67	91
20°	88	88	85	76	69	87	99	80	105
22.5°	95	95	90	80	71	91	112	97	119
25°	101	102	96	84	73	95	123	117	132
27.5°	108	108	101	88	76	101	131	135	143
30°	114	113	107	92	78	104	138	151	156
32.5°	119	120	112	95	80	107	147	166	167
35°	126	126	117	99	82	112	154	179	177
37.5°	132	131	122	102	84	116	162	189	188
40°	137	137	127	105	86	119	169	197	197
42.5°	143	142	131	108	87	122	176	204	208
45°	147	147	136	111	89	127	183	212	217
47.5°	153	152	140	114	90	130	190	219	226
50°	158	157	145	117	92	131	197	225	234
52.5°	162	161	148	120	93	134	203	232	244
55°	166	165	152	122	94	136	209	239	251
57.5°	170	169	155	124	95	139	214	245	259
60°	174	173	158	126	96	140	219	251	266
62.5°	177	176	161	127	96	142	223	257	271
65°	180	179	163	129	97	143	227	264	276
67.5°	182	181	165	130	97	144	231	268	280
70°	184	183	167	131	97	145	234	273	286
72.5°	186	185	168	131	97	146	236	277	290
75°	187	186	169	132	97	147	238	281	293
77.5°	188	187	170	132	97	147	240	283	295
80°	188	187	170	132	96	147	241	285	299
82.5°	189	187	170	131	95	146	241	286	302
85°	188	187	170	131	94	145	240	287	305
87.5°	188	187	170	131	94	145	240	287	307
90°	188	187	170	131	94	145	240	287	307
92.5°	188	187	169	131	94	145	240	286	308
95°	188	187	169	131	94	145	239	286	309
97.5°	187	186	169	131	95	145	239	284	310
100°	187	186	168	131	95	145	237	283	309
102.5°	186	184	168	130	95	144	235	279	308
105°	184	183	166	129	95	144	233	276	305
107.5°	182	181	165	129	95	143	230	272	302
110°	180	179	163	127	95	141	226	267	298



TEST NUMBER: P34353

CATALOG NUMBER: 161-25-W-L3/835-UNV

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	177	176	161	126	94	140	222	261	293
115°	174	173	158	124	93	138	218	257	289
117.5°	171	170	155	123	93	136	214	251	284
120°	167	166	152	121	92	134	209	245	279
122.5°	163	163	149	119	91	132	204	239	271
125°	159	158	145	116	89	129	198	233	265
127.5°	155	154	141	114	88	127	191	226	257
130°	150	149	137	111	87	126	185	219	248
132.5°	145	145	133	108	85	123	178	212	239
135°	140	139	129	105	83	117	171	205	230
137.5°	135	134	124	102	82	114	164	198	219
140°	129	128	119	99	80	112	157	191	209
142.5°	124	123	114	95	78	108	150	183	198
145°	118	117	109	92	76	102	142	174	187
147.5°	112	111	104	88	74	100	134	165	175
150°	106	105	99	84	71	95	126	155	162
152.5°	99	98	93	80	69	91	119	144	150
155°	92	92	88	77	66	86	110	133	136
157.5°	86	86	82	72	64	81	102	121	122
160°	80	79	77	68	61	76	93	108	108
162.5°	74	73	71	65	59	71	85	95	93
165°	67	68	66	61	56	67	77	82	79
167.5°	62	62	61	57	54	62	69	70	67
170°	56	56	56	54	51	57	61	61	58
172.5°	51	51	52	50	49	52	55	54	52
175°	46	47	48	47	47	48	49	47	47
177.5°	43	43	44	44	44	44	44	43	42
180°	42	42	42	42	42	42	42	42	42

(END OF REPORT)