

Scaled data based on original data using  
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge or  
Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: SHAPER

Report Number: 253P260

Luminaire Tested: **1215-XX-44-MH/4/70-T5C/1/40**

Issue Date: 3/3/2020

**Test Information**

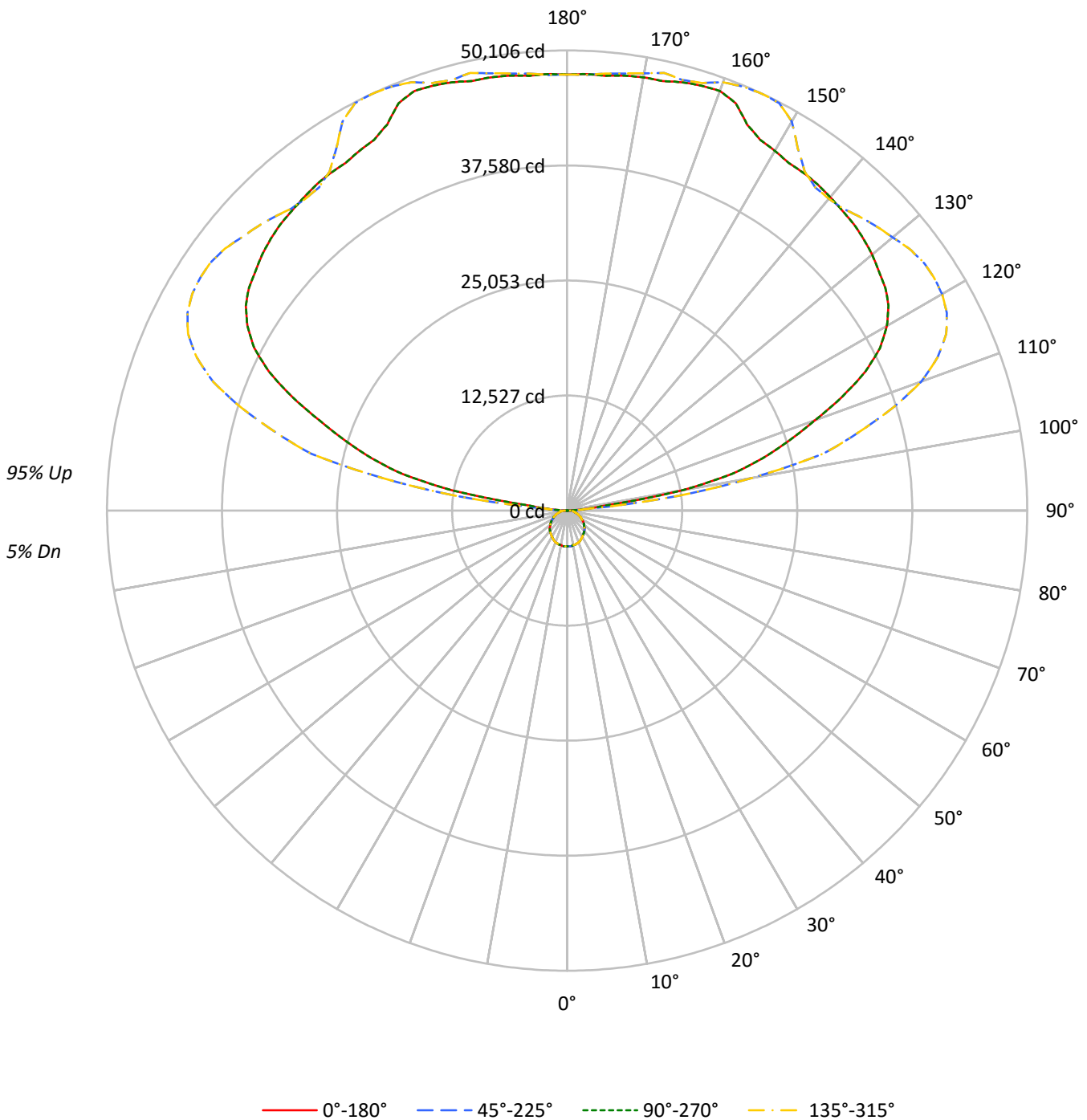
Test Method: LM-46-04  
Report Number: 253P260  
Test Lab: METALUX LABORATORIES  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 1215-XX-44-MH/4/70-T5C/1/40  
Description: SHAPER 44 INCH 1215 SERIES DIRECT/INDIRECT INDOOR PENDANT FIXTURE  
WITH SHALLOW BOWL  
Light Source: FOUR 70 WATT T6 CLEAR CERAMIC METAL HALIDE LAMPS AND ONE 40 WATT CIRCLINE  
(4)CDM70MH - 6700 LUMENS AND (1)TL5C40W/830 - 3300 LUMENS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 30100 (1 lamp)  
Luminaire Lumens: 229534.8 lumens  
Efficiency: 762.6%  
Efficacy: 717.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.4  
Luminous Opening: Vertical Cylinder (Dia: 3.67' x H: 0.69')  
CIE Type: Indirect  
  
Input Watts (W): 320  
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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CATALOG NUMBER: 1215-XX-44-MH/4/70-T5C/1/40

### 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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	736	736	736	736	635	635	635	635	446	446	446	274	274	274	115	115	115	41
1	669	638	610	585	575	551	528	508	388	374	361	238	231	224	100	97	95	33
2	608	556	512	476	522	480	445	415	338	317	298	208	196	186	87	83	79	27
3	554	487	435	394	475	421	379	345	298	271	249	183	168	156	77	71	67	22
4	505	429	373	331	433	371	326	290	263	233	210	162	146	132	68	62	57	19
5	462	380	323	280	396	329	282	246	233	202	179	144	127	113	61	54	49	16
6	423	338	281	240	363	293	246	211	208	177	154	129	111	97	55	48	42	14
7	390	303	247	208	334	263	216	183	187	156	133	116	98	85	49	42	37	12
8	360	273	218	181	309	237	191	159	169	138	116	105	87	74	45	38	32	11
9	333	247	194	158	286	215	170	140	153	123	102	96	78	65	41	34	29	10
10	310	224	173	140	266	195	152	123	140	110	90	87	70	58	38	31	26	9

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	3976	3976	3976	3976
5°	3909	3909	3909	3909
10°	3775	3775	3775	3775
15°	3769	3769	3769	3769
20°	3693	3693	3693	3693
25°	3542	3542	3542	3542
30°	3414	3414	3414	3414
35°	3305	3305	3305	3305
40°	3215	3215	3215	3215
45°	3142	3142	3142	3142
50°	2963	2963	2963	2963
55°	2783	2783	2783	2783
60°	2596	2596	2596	2596
65°	2553	2553	2553	2553
70°	2340	2340	2340	2340
75°	2083	2083	2083	2083
80°	1995	1995	1995	1995
85°	1882	1882	1882	1882



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	370.2	0.2	1.2
10°-20°	1064.5	0.5	3.5
20°-30°	1614.6	0.7	5.4
30°-40°	1942.5	0.8	6.5
40°-50°	2056.3	0.9	6.8
50°-60°	1901.3	0.8	6.3
60°-70°	1547.6	0.7	5.1
70°-80°	1095.5	0.5	3.6
80°-90°	599.3	0.3	2.0
90°-100°	5181.9	2.3	17.2
100°-110°	28619.4	12.5	95.1
110°-120°	39505.4	17.2	131.2
120°-130°	39600.9	17.3	131.6
130°-140°	34993.1	15.2	116.3
140°-150°	28796.3	12.5	95.7
150°-160°	22270.0	9.7	74.0
160°-170°	13804.4	6.0	45.9
170°-180°	4571.6	2.0	15.2
0°-30°	3049.3	1.3	10.1
0°-40°	4991.8	2.2	16.6
0°-60°	8949.4	3.9	29.7
0°-90°	12191.8	5.3	40.5
90°-120°	73306.7	31.9	243.5
90°-150°	176697.0	77.0	587.0
90°-180°	217343.0	94.7	722.1
0°-180°	229534.8	100.0	762.6

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	3900	3900	3900	3900	3900	
5°	3900	3900	3900	3900	3900	370
15°	3800	3800	3800	3800	3800	1065
25°	3500	3500	3500	3500	3500	1615
35°	3100	3100	3100	3100	3100	1943
45°	2700	2700	2700	2700	2700	2056
55°	2100	2100	2100	2100	2100	1901
65°	1600	1600	1600	1600	1600	1548
75°	1000	1000	1000	1000	1000	1095
85°	600	600	600	600	600	531
90°	0	0	0	0	0	154
95°	2106	2106	2106	2106	2106	3490
105°	22062	22062	22062	22062	22062	22794
115°	35845	35845	35845	35845	35845	34954
125°	42306	42306	42306	42306	42306	37737
135°	44124	44124	44124	44124	44124	34100
145°	44890	44890	44890	44890	44890	28179
155°	46374	46374	46374	46374	46374	21562
165°	48288	48288	48288	48288	48288	13690
175°	47522	47522	47522	47522	47522	4553
180°	47474	47474	47474	47474	47474	



TEST NUMBER: 253P260

CATALOG NUMBER: 1215-XX-44-MH/4/70-T5C/1/40

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	3900	3900	3900	3900	3900	3900	3900	3900	3900	3900	3900
2.5°	3900	3900	3900	3900	3900	3900	3900	3900	3900	3900	3900
5°	3900	3900	3900	3900	3900	3900	3900	3900	3900	3900	3900
7.5°	3900	3900	3900	3900	3900	3900	3900	3900	3900	3900	3900
10°	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800
12.5°	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800
15°	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800
17.5°	3700	3700	3700	3700	3700	3700	3700	3700	3700	3700	3700
20°	3700	3700	3700	3700	3700	3700	3700	3700	3700	3700	3700
22.5°	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600
25°	3500	3500	3500	3500	3500	3500	3500	3500	3500	3500	3500
27.5°	3400	3400	3400	3400	3400	3400	3400	3400	3400	3400	3400
30°	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300
32.5°	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200
35°	3100	3100	3100	3100	3100	3100	3100	3100	3100	3100	3100
37.5°	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
40°	2900	2900	2900	2900	2900	2900	2900	2900	2900	2900	2900
42.5°	2800	2800	2800	2800	2800	2800	2800	2800	2800	2800	2800
45°	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700
47.5°	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500
50°	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400
52.5°	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300
55°	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
57.5°	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
60°	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
62.5°	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
65°	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
67.5°	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
70°	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300
72.5°	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
75°	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
77.5°	900	900	900	900	900	900	900	900	900	900	900
80°	800	800	800	800	800	800	800	800	800	800	800
82.5°	700	700	700	700	700	700	700	700	700	700	700
85°	600	600	600	600	600	600	600	600	600	600	600
87.5°	500	500	500	500	500	500	500	500	500	500	500
90°	0	0	0	0	0	0	0	0	0	0	0
92.5°	622	622	814	622	622	622	814	622	622	622	814
95°	2106	2393	2489	2393	2106	2393	2489	2393	2106	2393	2489
97.5°	4068	7514	12156	7514	4068	7514	12156	7514	4068	7514	12156
100°	12730	16415	20435	16415	12730	16415	20435	16415	12730	16415	20435
102.5°	18329	23785	28523	23785	18329	23785	28523	23785	18329	23785	28523
105°	22062	27996	32830	27996	22062	27996	32830	27996	22062	27996	32830
107.5°	25316	31634	37185	31634	25316	31634	37185	31634	25316	31634	37185
110°	28666	34936	41014	34936	28666	34936	41014	34936	28666	34936	41014



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CATALOG NUMBER: 1215-XX-44-MH/4/70-T5C/1/40

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	32447	37807	43694	37807	32447	37807	43694	37807	32447	37807	43694
115°	35845	40009	45560	40009	35845	40009	45560	40009	35845	40009	45560
117.5°	38429	41636	46613	41636	38429	41636	46613	41636	38429	41636	46613
120°	40200	42689	47139	42689	40200	42689	47139	42689	40200	42689	47139
122.5°	41492	43311	47331	43311	41492	43311	47331	43311	41492	43311	47331
125°	42306	43741	47283	43741	42306	43741	47283	43741	42306	43741	47283
127.5°	42784	44220	46900	44220	42784	44220	46900	44220	42784	44220	46900
130°	43359	44651	46278	44651	43359	44651	46278	44651	43359	44651	46278
132.5°	43789	45225	45751	45225	43789	45225	45751	45225	43789	45225	45751
135°	44124	45895	45177	45895	44124	45895	45177	45895	44124	45895	45177
137.5°	44316	46374	44555	46374	44316	46374	44555	46374	44316	46374	44555
140°	44555	46517	44316	46517	44555	46517	44316	46517	44555	46517	44316
142.5°	44794	46421	44364	46421	44794	46421	44364	46421	44794	46421	44364
145°	44890	46374	45081	46374	44890	46374	45081	46374	44890	46374	45081
147.5°	44890	46469	46756	46469	44890	46469	46756	46469	44890	46469	46756
150°	45225	46517	48910	46517	45225	46517	48910	46517	45225	46517	48910
152.5°	45512	46996	50011	46996	45512	46996	50011	46996	45512	46996	50011
155°	46374	48240	50106	48240	46374	48240	50106	48240	46374	48240	50106
157.5°	48001	49293	49963	49293	48001	49293	49963	49293	48001	49293	49963
160°	48623	49436	49628	49436	48623	49436	49628	49436	48623	49436	49628
162.5°	48527	49197	48814	49197	48527	49197	48814	49197	48527	49197	48814
165°	48288	48719	48527	48719	48288	48719	48527	48719	48288	48719	48527
167.5°	47905	48288	48814	48288	47905	48288	48814	48288	47905	48288	48814
170°	47905	48288	48336	48288	47905	48288	48336	48288	47905	48288	48336
172.5°	47761	48096	48001	48096	47761	48096	48001	48096	47761	48096	48001
175°	47522	47761	47761	47761	47522	47761	47761	47761	47522	47761	47761
177.5°	47570	47570	47474	47570	47570	47570	47474	47570	47570	47570	47474
180°	47474	47474	47474	47474	47474	47474	47474	47474	47474	47474	47474



TEST NUMBER: 253P260

CATALOG NUMBER: 1215-XX-44-MH/4/70-T5C/1/40

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3900	3900	3900	3900	3900	3900
2.5°	3900	3900	3900	3900	3900	3900
5°	3900	3900	3900	3900	3900	3900
7.5°	3900	3900	3900	3900	3900	3900
10°	3800	3800	3800	3800	3800	3800
12.5°	3800	3800	3800	3800	3800	3800
15°	3800	3800	3800	3800	3800	3800
17.5°	3700	3700	3700	3700	3700	3700
20°	3700	3700	3700	3700	3700	3700
22.5°	3600	3600	3600	3600	3600	3600
25°	3500	3500	3500	3500	3500	3500
27.5°	3400	3400	3400	3400	3400	3400
30°	3300	3300	3300	3300	3300	3300
32.5°	3200	3200	3200	3200	3200	3200
35°	3100	3100	3100	3100	3100	3100
37.5°	3000	3000	3000	3000	3000	3000
40°	2900	2900	2900	2900	2900	2900
42.5°	2800	2800	2800	2800	2800	2800
45°	2700	2700	2700	2700	2700	2700
47.5°	2500	2500	2500	2500	2500	2500
50°	2400	2400	2400	2400	2400	2400
52.5°	2300	2300	2300	2300	2300	2300
55°	2100	2100	2100	2100	2100	2100
57.5°	2000	2000	2000	2000	2000	2000
60°	1800	1800	1800	1800	1800	1800
62.5°	1700	1700	1700	1700	1700	1700
65°	1600	1600	1600	1600	1600	1600
67.5°	1400	1400	1400	1400	1400	1400
70°	1300	1300	1300	1300	1300	1300
72.5°	1200	1200	1200	1200	1200	1200
75°	1000	1000	1000	1000	1000	1000
77.5°	900	900	900	900	900	900
80°	800	800	800	800	800	800
82.5°	700	700	700	700	700	700
85°	600	600	600	600	600	600
87.5°	500	500	500	500	500	500
90°	0	0	0	0	0	0
92.5°	622	622	622	814	622	622
95°	2393	2106	2393	2489	2393	2106
97.5°	7514	4068	7514	12156	7514	4068
100°	16415	12730	16415	20435	16415	12730
102.5°	23785	18329	23785	28523	23785	18329
105°	27996	22062	27996	32830	27996	22062
107.5°	31634	25316	31634	37185	31634	25316
110°	34936	28666	34936	41014	34936	28666





TEST NUMBER: 253P260

CATALOG NUMBER: 1215-XX-44-MH/4/70-T5C/1/40

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	37807	32447	37807	43694	37807	32447
115°	40009	35845	40009	45560	40009	35845
117.5°	41636	38429	41636	46613	41636	38429
120°	42689	40200	42689	47139	42689	40200
122.5°	43311	41492	43311	47331	43311	41492
125°	43741	42306	43741	47283	43741	42306
127.5°	44220	42784	44220	46900	44220	42784
130°	44651	43359	44651	46278	44651	43359
132.5°	45225	43789	45225	45751	45225	43789
135°	45895	44124	45895	45177	45895	44124
137.5°	46374	44316	46374	44555	46374	44316
140°	46517	44555	46517	44316	46517	44555
142.5°	46421	44794	46421	44364	46421	44794
145°	46374	44890	46374	45081	46374	44890
147.5°	46469	44890	46469	46756	46469	44890
150°	46517	45225	46517	48910	46517	45225
152.5°	46996	45512	46996	50011	46996	45512
155°	48240	46374	48240	50106	48240	46374
157.5°	49293	48001	49293	49963	49293	48001
160°	49436	48623	49436	49628	49436	48623
162.5°	49197	48527	49197	48814	49197	48527
165°	48719	48288	48719	48527	48719	48288
167.5°	48288	47905	48288	48814	48288	47905
170°	48288	47905	48288	48336	48288	47905
172.5°	48096	47761	48096	48001	48096	47761
175°	47761	47522	47761	47761	47761	47522
177.5°	47570	47570	47570	47474	47570	47570
180°	47474	47474	47474	47474	47474	47474

(END OF REPORT)