

Scaled data based on original data using
LM-31-95 IESNA Approved Method for Photometric Testing of Roadway Luminaires
Using Incandescent Filament and High Intensity Discharge Lamps

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P10646

Luminaire Tested:

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: P10646
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number:
Description: STREETWORKS HID POST TOP FIXTURE
WITH FOUR 3002C41 PRISMATIC PANES
AND HORIZONTALY LAMPED REFLECTOR WITH SOCKET IN TYPE 3 & 4 POSITION
AND SOCKET STREET SIDE
Light Source: 100 WATT PULSE-START COATED ED-17
MH100/C/MED 100 WATTS
Ballast/Driver: -

Summary

Lumens per Lamp: 8500 (1 lamp)
Luminaire Lumens: 5007 lumens
Efficiency: 58.9%
Efficacy: 50.1 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.96' x L: 0.96' x H: 0.79')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U3 - G2

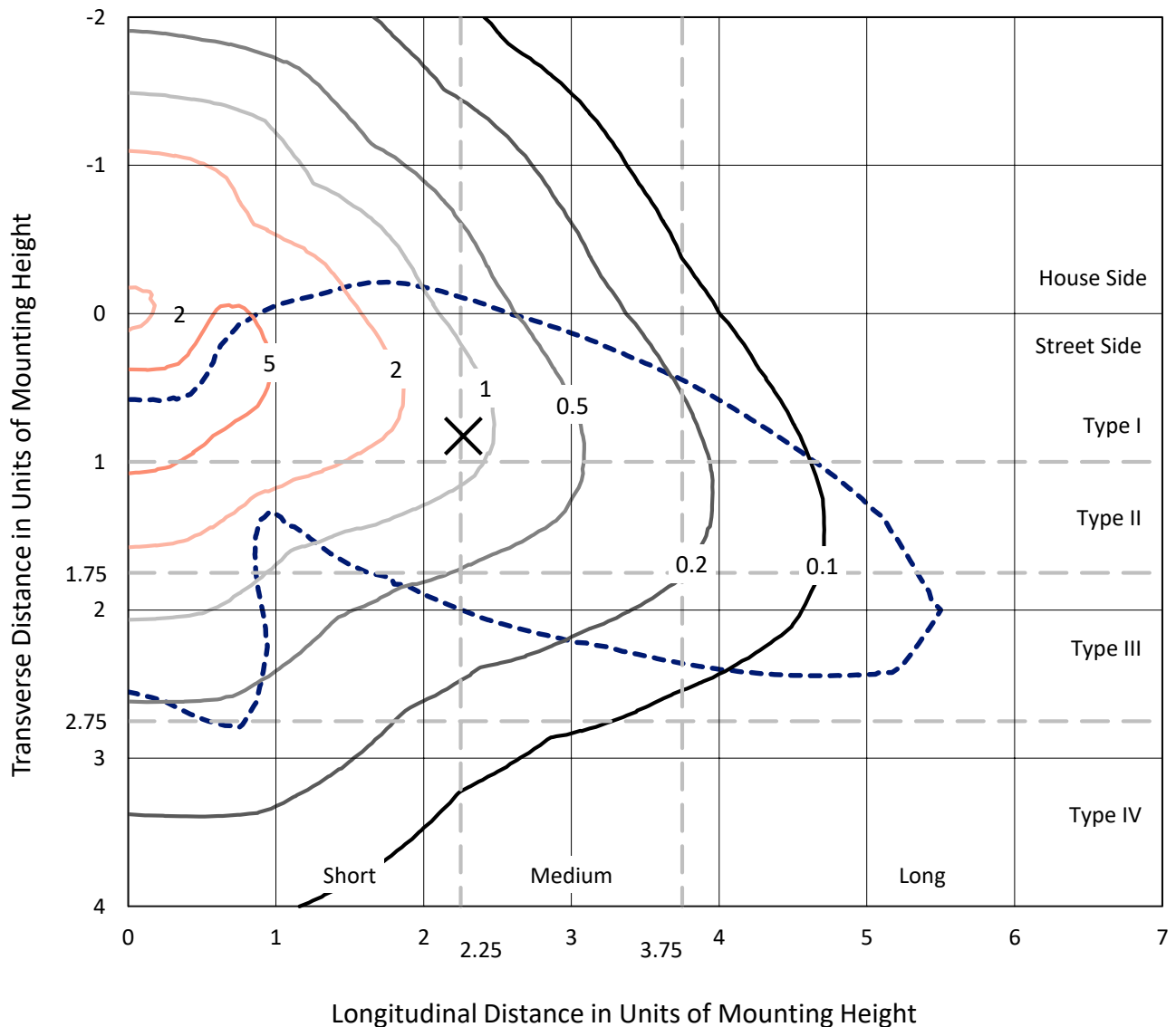
Input Watts (W): 100
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

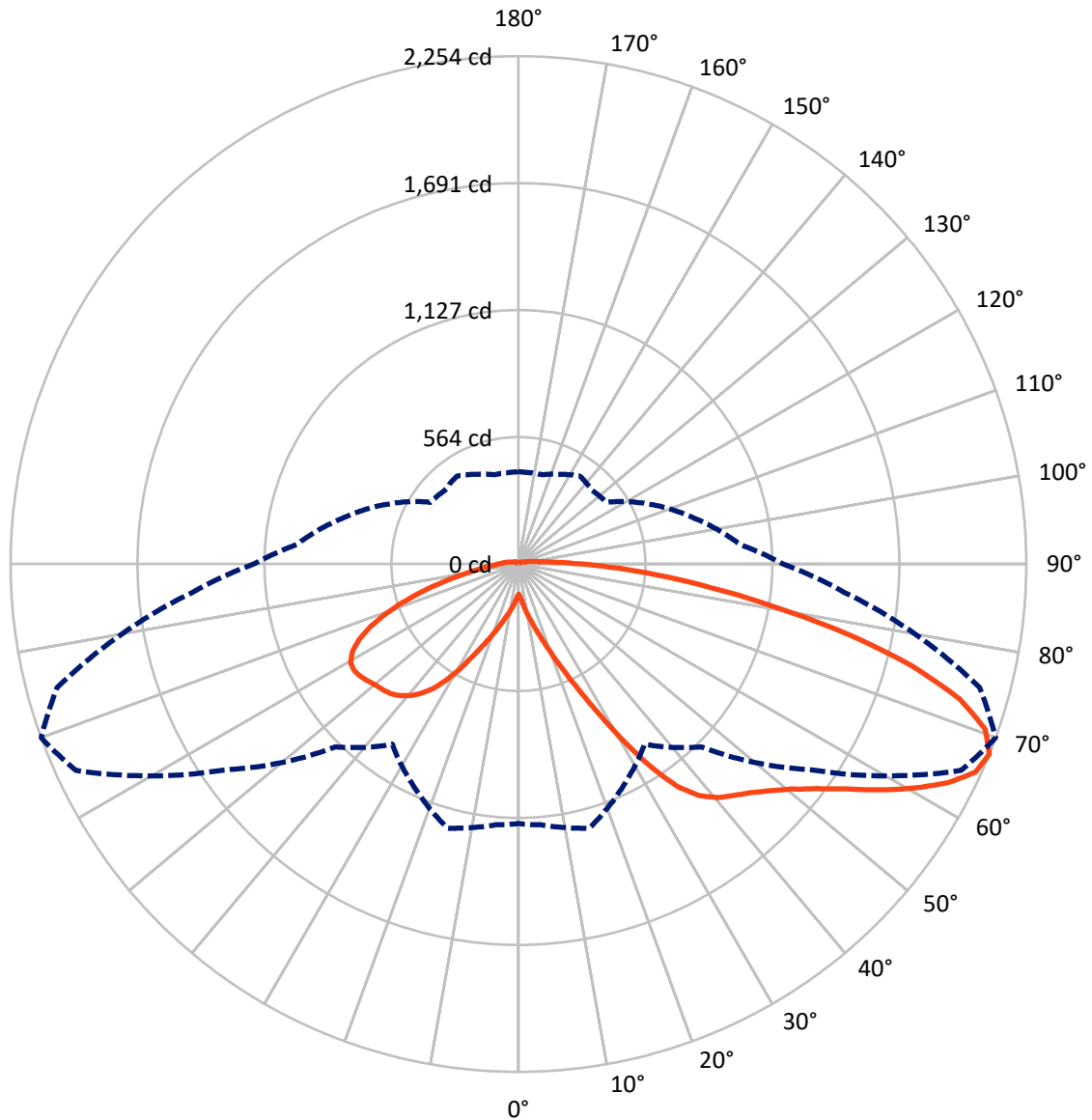
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.2 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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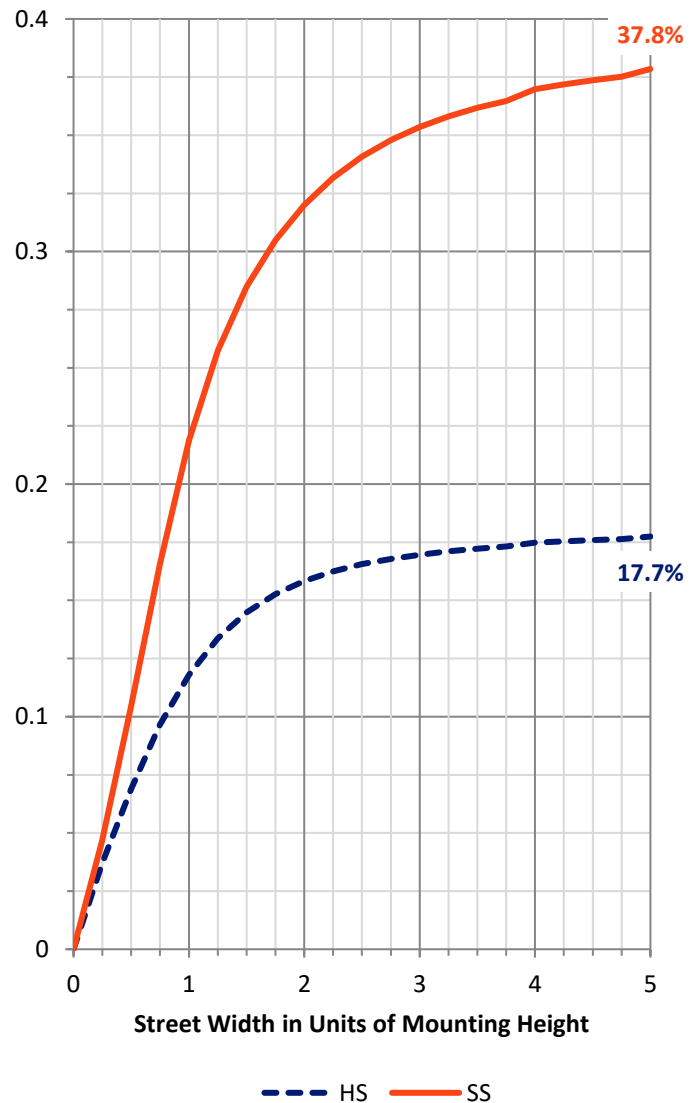
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1540.7	74.1	1614.8
	% Lamp	18.1	0.9	19.0
Street Side	Lumens	3300.4	91.8	3392.2
	% Lamp	38.8	1.1	39.9
Total	Lumens	4841.1	165.9	5007.0
	% Lamp	57.0	2.0	58.9

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	17.7	0.4	0.2
10°-20°	89.5	1.8	1.1
20°-30°	270.1	5.4	3.2
30°-40°	589.5	11.8	6.9
40°-50°	854.8	17.1	10.1
50°-60°	982.5	19.6	11.6
60°-70°	1024.0	20.5	12.0
70°-80°	735.4	14.7	8.7
80°-90°	277.6	5.5	3.3
90°-100°	80.5	1.6	0.9
100°-110°	36.6	0.7	0.4
110°-120°	21.1	0.4	0.2
120°-130°	14.5	0.3	0.2
130°-140°	8.5	0.2	0.1
140°-150°	3.8	0.1	0.0
150°-160°	0.8	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	4841.1	96.7	57.0
0°-180°	5007.0	100.0	58.9

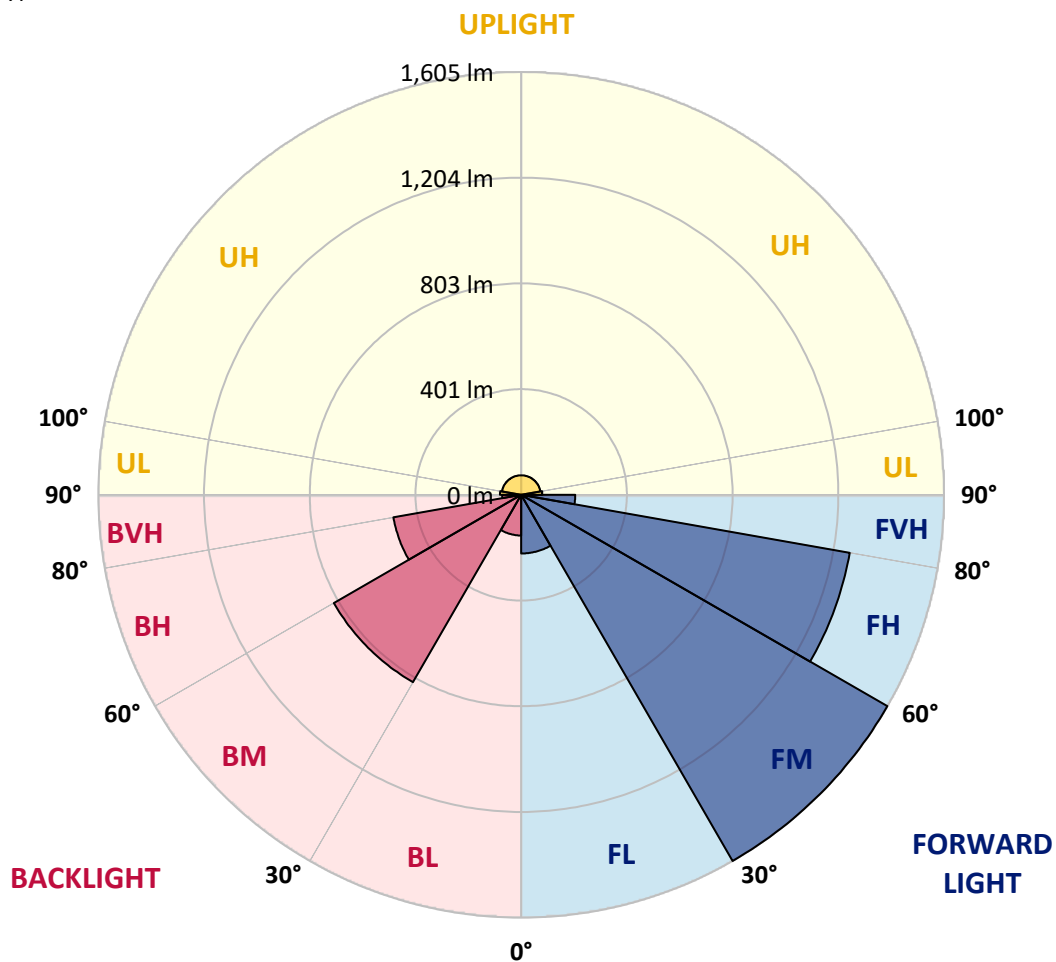


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	222.9	2.6			
FM (30°-60°)	1605.5	18.9			
FH (60°-80°)	1266.7	14.9			G1/1800
FVH (80°-90°)	205.3	2.4			G2/225
BL (0°-30°)	154.5	1.8	B1/500		
BM (30°-60°)	821.4	9.7	B1/1000		
BH (60°-80°)	492.7	5.8	B1/500		G1/500
BVH (80°-90°)	72.2	0.8			G1/100
UL (90°-100°)	80.5	0.9		U3/500	
UH (100°-180°)	74.1	0.9		U3/500	
Trapped Light	3493.0	41.1			

BUG Rating: B1-U3-G2
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	134	134	134	134	134	134	134	134	134	134	134
2.5°	152	152	153	154	155	152	149	147	146	145	140
5°	180	179	180	180	177	175	174	170	167	165	162
7.5°	216	215	216	215	210	205	202	199	197	195	189
10°	262	262	261	257	248	240	235	230	228	225	217
12.5°	322	321	318	308	295	284	275	268	265	261	250
15°	391	389	382	370	352	336	325	314	309	304	291
17.5°	479	473	464	442	416	397	377	367	362	357	339
20°	581	576	560	530	499	473	452	434	428	419	392
22.5°	692	687	666	630	592	562	541	517	511	498	467
25°	813	810	781	735	690	664	644	622	612	602	559
27.5°	950	945	904	849	800	773	761	747	737	723	679
30°	1100	1092	1038	972	912	891	898	898	895	883	822
32.5°	1274	1262	1195	1098	1029	1020	1055	1075	1066	1046	967
35°	1472	1452	1358	1230	1150	1150	1216	1231	1211	1172	1063
37.5°	1653	1630	1523	1359	1258	1276	1356	1355	1304	1247	1118
40°	1738	1717	1630	1463	1355	1380	1462	1428	1363	1292	1156
42.5°	1725	1707	1656	1514	1416	1448	1527	1475	1404	1337	1201
45°	1650	1640	1618	1512	1433	1477	1567	1515	1447	1389	1247
47.5°	1568	1555	1551	1469	1405	1475	1595	1562	1503	1447	1287
50°	1490	1481	1483	1406	1349	1451	1612	1615	1570	1518	1330
52.5°	1412	1404	1416	1334	1271	1412	1624	1682	1656	1608	1376
55°	1352	1342	1357	1265	1195	1364	1632	1765	1762	1714	1436
57.5°	1296	1289	1306	1203	1124	1318	1640	1862	1891	1835	1485
60°	1258	1253	1271	1158	1072	1279	1654	1972	2019	1953	1526
62.5°	1223	1222	1247	1131	1033	1248	1665	2074	2139	2056	1542
65°	1195	1198	1232	1113	1007	1210	1650	2148	2228	2119	1519
67.5°	1152	1162	1214	1093	976	1148	1593	2168	2254	2120	1454
70°	1071	1089	1162	1037	908	1050	1491	2109	2198	2047	1345
72.5°	940	962	1046	940	816	927	1348	1970	2048	1886	1199
75°	780	803	890	807	697	786	1166	1744	1804	1652	1018
77.5°	618	638	729	673	582	643	959	1447	1490	1343	794
80°	466	489	574	532	467	511	755	1129	1152	1025	596
82.5°	322	344	416	409	359	386	574	850	861	750	430
85°	203	212	274	286	267	284	414	613	612	534	305
87.5°	123	129	169	191	188	199	288	410	407	349	209
90°	75	80	106	129	137	145	195	255	248	218	145
92.5°	53	56	73	89	98	104	133	159	155	142	100
95°	43	45	57	69	75	80	93	105	103	97	74
97.5°	38	39	48	57	61	65	70	76	77	73	59
100°	33	34	41	47	50	54	55	60	61	57	48
102.5°	30	31	36	39	41	44	45	48	48	45	39
105°	29	29	31	33	35	37	38	39	39	36	32
107.5°	28	27	28	28	31	32	32	32	32	30	27
110°	26	25	25	25	27	29	28	27	26	25	23



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
112.5°	23	23	23	23	25	27	25	24	23	21	21
115°	22	21	21	21	23	24	23	21	20	19	19
117.5°	21	20	20	20	22	23	21	20	18	17	18
120°	20	20	19	19	20	21	20	18	17	17	17
122.5°	20	19	19	18	19	19	18	17	16	16	17
125°	20	19	18	17	18	17	17	16	15	15	16
127.5°	19	18	17	16	16	16	15	14	14	15	16
130°	18	18	16	15	14	14	13	13	13	13	15
132.5°	17	16	15	14	13	12	12	12	12	12	13
135°	14	14	13	12	11	11	10	10	10	11	12
137.5°	12	12	12	11	10	9	9	9	9	9	10
140°	11	11	10	9	8	8	7	7	8	8	9
142.5°	10	10	9	8	7	6	6	6	7	7	7
145°	9	9	8	7	6	5	5	5	6	6	7
147.5°	8	8	7	6	5	4	4	4	5	5	6
150°	7	7	6	5	3	2	2	3	4	4	5
152.5°	6	6	5	4	2	1	2	2	3	3	3
155°	5	5	4	3	1	0	1	1	2	2	2
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



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CATALOG NUMBER:

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	134	134	134	134	134	134	134	134	134	134	134
2.5°	140	141	145	148	149	148	145	143	141	140	141
5°	161	161	165	166	164	160	159	157	158	157	157
7.5°	187	186	186	184	182	180	181	182	181	180	180
10°	214	212	208	204	200	198	200	204	207	208	208
12.5°	244	242	234	224	217	216	221	229	236	239	240
15°	283	278	263	249	240	239	248	261	273	279	280
17.5°	330	319	298	277	266	270	282	301	321	331	332
20°	381	367	338	310	298	305	325	352	376	390	392
22.5°	448	428	381	350	335	346	373	410	447	469	473
25°	534	506	440	388	372	386	431	484	531	558	564
27.5°	641	603	511	436	410	435	493	559	607	628	633
30°	777	722	592	490	450	482	549	614	650	658	661
32.5°	909	838	679	542	484	521	590	646	664	663	665
35°	1003	930	752	590	514	547	615	662	670	666	668
37.5°	1056	985	807	632	538	568	633	676	675	670	672
40°	1095	1022	848	665	560	584	650	684	679	674	677
42.5°	1134	1058	881	691	581	601	664	691	680	674	676
45°	1171	1085	905	709	595	617	678	693	673	664	666
47.5°	1199	1102	920	720	603	628	689	690	662	650	654
50°	1221	1113	931	729	606	635	695	683	647	635	635
52.5°	1248	1128	948	742	609	638	695	671	626	613	613
55°	1279	1147	964	756	612	637	688	650	599	586	589
57.5°	1301	1158	974	764	610	628	669	621	568	557	559
60°	1311	1153	967	761	597	606	639	585	535	526	529
62.5°	1299	1128	935	738	572	570	594	542	500	493	496
65°	1254	1072	879	692	530	520	540	494	457	457	460
67.5°	1174	988	799	631	477	462	476	439	410	408	410
70°	1061	876	694	556	419	401	410	383	362	357	358
72.5°	929	750	581	470	357	341	347	326	310	306	305
75°	771	609	464	380	298	284	283	266	254	251	250
77.5°	594	466	355	300	240	229	223	208	200	196	194
80°	441	339	264	228	190	181	176	165	159	154	153
82.5°	316	244	191	178	155	147	136	126	123	119	119
85°	227	180	148	141	125	117	107	101	100	97	96
87.5°	165	134	112	112	102	95	87	83	84	82	81
90°	118	100	90	91	84	78	72	71	73	71	70
92.5°	86	78	75	77	71	66	62	62	64	63	62
95°	68	64	64	66	61	57	55	54	57	55	54
97.5°	55	54	56	57	52	49	48	48	50	48	48
100°	46	46	48	49	45	43	41	42	43	42	41
102.5°	38	38	41	42	39	37	36	36	37	36	36
105°	32	32	35	36	33	33	32	32	32	30	30
107.5°	27	27	30	31	29	29	28	27	27	25	26
110°	23	24	26	27	27	26	25	24	23	22	22



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	21	21	23	25	24	24	23	21	20	19	19
115°	19	20	21	22	23	22	21	19	18	17	17
117.5°	18	19	19	21	21	20	19	17	16	16	16
120°	17	18	18	19	20	19	18	16	15	15	15
122.5°	17	17	17	18	18	17	16	15	14	15	15
125°	17	17	16	17	17	16	15	14	13	14	14
127.5°	16	16	15	16	15	14	13	13	13	13	13
130°	15	15	14	14	14	13	12	12	12	13	13
132.5°	13	13	13	13	12	11	11	10	10	11	12
135°	12	12	12	11	11	10	9	9	9	10	10
137.5°	10	10	10	10	10	9	8	7	8	8	8
140°	9	9	9	8	8	7	7	6	7	7	7
142.5°	7	8	7	7	7	6	5	5	6	6	6
145°	7	7	7	6	6	5	4	4	5	5	5
147.5°	6	6	6	5	5	4	3	4	4	4	4
150°	5	5	5	4	4	3	2	3	3	3	3
152.5°	3	3	4	3	3	2	2	2	2	2	2
155°	2	2	3	3	2	1	1	1	2	2	2
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)