

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: 768326

Luminaire Tested: **UTR85QLXX33**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 768326
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTR85QLXX33
Description: 85WATT QL INDUCTION TYPE III TRADITIONAIRE POST TOP
Light Source: 85 WATT PHILIPS QL INDUCTION
Ballast/Driver: -

Summary

Lumens per Lamp: 6000 (1 lamp)
Luminaire Lumens: 35071.2 lumens
Efficiency: 584.5%
Efficacy: 412.6 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U5 - G5

Input Watts (W): 85
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



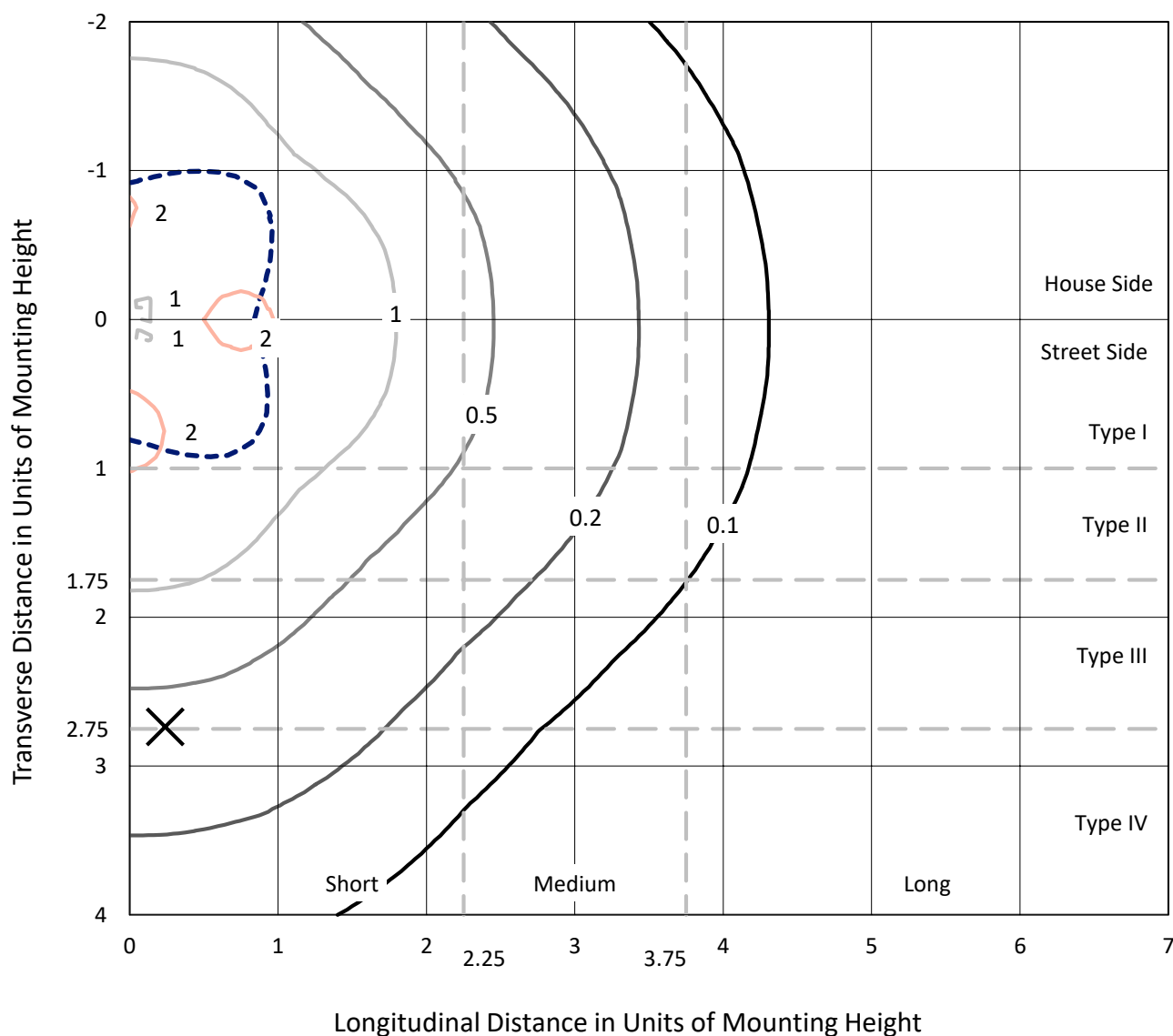
REPORT NUMBER: 768326

CATALOG NUMBER: UTR85QLXX33

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

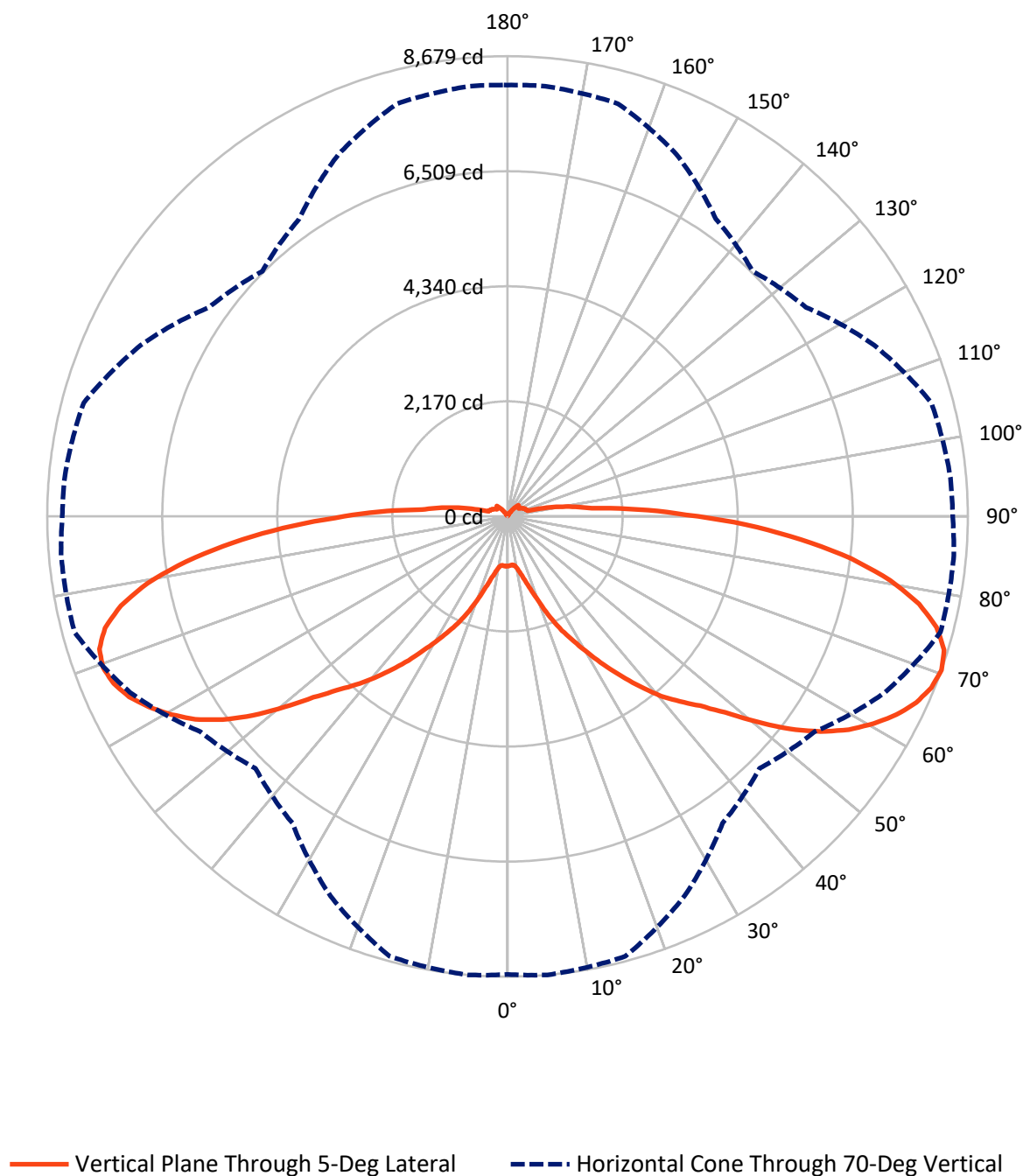
--- 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 2.3 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: 768326
CATALOG NUMBER: UTR85QLXX33

Luminous Intensity Polar Plot



REPORT NUMBER: 768326

CATALOG NUMBER: UTR85QLXX33

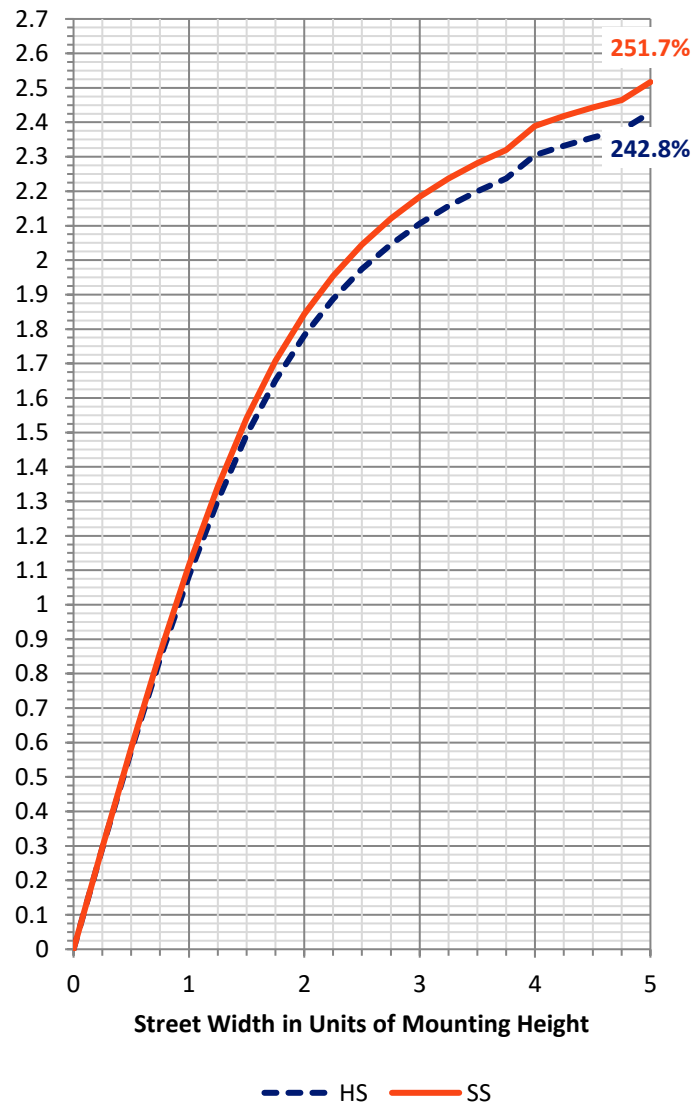
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15735.0	1486.0	17221.0
	% Lamp	262.2	24.8	287.0
Street Side	Lumens	16357.6	1492.7	17850.3
	% Lamp	272.6	24.9	297.5
Total	Lumens	32092.6	2978.7	35071.2
	% Lamp	534.9	49.6	584.5

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	87.7	0.3	1.5
10°-20°	342.2	1.0	5.7
20°-30°	953.6	2.7	15.9
30°-40°	1943.7	5.5	32.4
40°-50°	3347.9	9.5	55.8
50°-60°	5594.4	16.0	93.2
60°-70°	7536.2	21.5	125.6
70°-80°	7507.6	21.4	125.1
80°-90°	4779.3	13.6	79.7
90°-100°	1676.7	4.8	27.9
100°-110°	654.2	1.9	10.9
110°-120°	319.5	0.9	5.3
120°-130°	227.2	0.6	3.8
130°-140°	147.0	0.4	2.4
140°-150°	59.2	0.2	1.0
150°-160°	9.3	0.0	0.2
160°-170°	0.2	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	32092.6	91.5	534.9
0°-180°	35071.2	100.0	584.5

Coefficient of Utilization



REPORT NUMBER: 768326

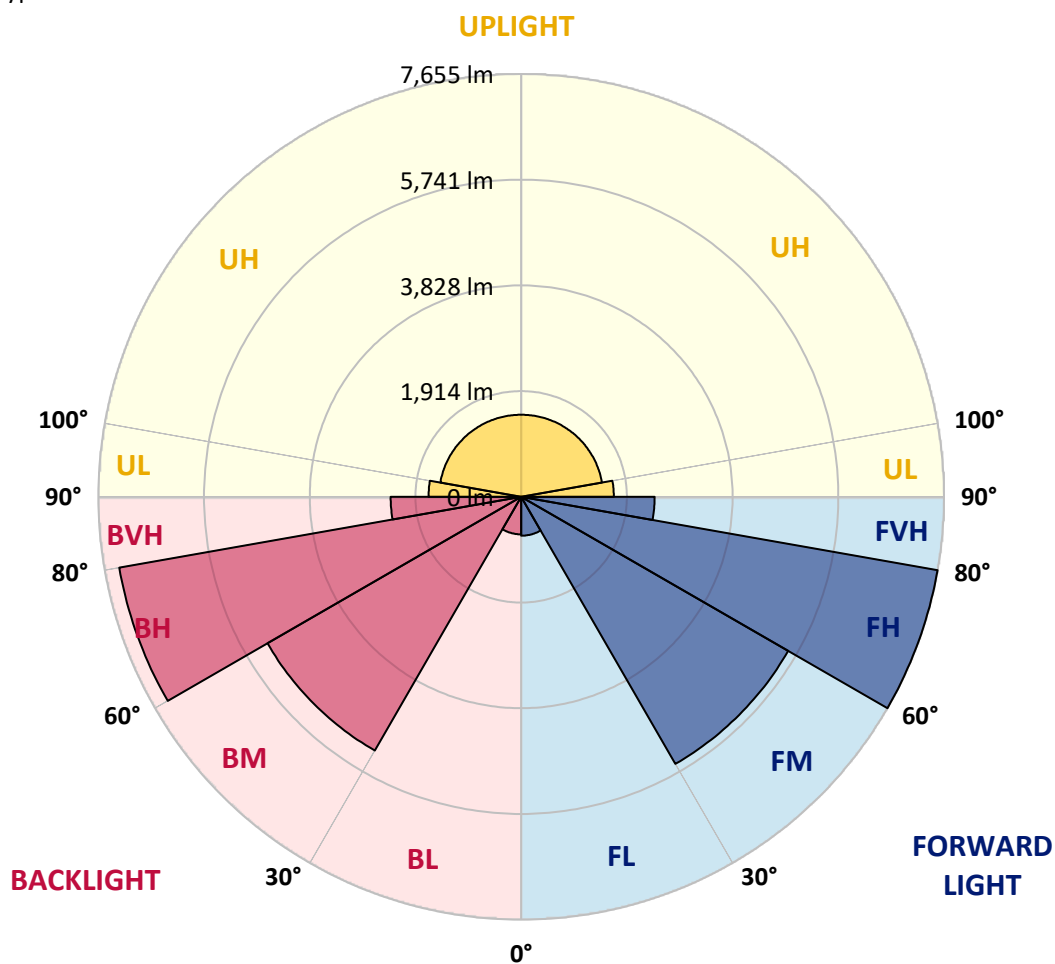
CATALOG NUMBER: UTR85QLXX33

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	703.9	11.7			
FM	(30°-60°)	5582.4	93.0			
FH	(60°-80°)	7655.1	127.6			G4/12000
FVH	(80°-90°)	2416.2	40.3			G5
BL	(0°-30°)	679.6	11.3	B2/1000		
BM	(30°-60°)	5303.6	88.4	B4/8500		
BH	(60°-80°)	7388.7	123.1	B5		G3/7500
BVH	(80°-90°)	2363.2	39.4			G5
UL	(90°-100°)	1676.7	27.9		U5	
UH	(100°-180°)	1486.0	24.8		U5	
Trapped Light		-29071.2	-484.5			

BUG Rating: B5-U5-G5

Type V Short





REPORT NUMBER: 768326

CATALOG NUMBER: UTR85QLXX33

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	938	938	938	938	938	938	938	938	938	938	938
2.5°	923	927	927	923	923	919	919	923	923	923	923
5°	923	919	916	912	904	901	897	901	901	901	904
7.5°	938	934	927	916	904	893	886	886	893	893	901
10°	991	991	976	957	934	916	904	908	923	934	942
12.5°	1111	1107	1081	1047	1006	983	979	1002	1028	1051	1054
15°	1268	1265	1223	1163	1103	1073	1088	1118	1171	1205	1212
17.5°	1486	1475	1422	1328	1231	1193	1223	1298	1370	1418	1430
20°	1764	1745	1662	1531	1415	1362	1411	1505	1614	1689	1704
22.5°	2086	2068	1944	1767	1625	1602	1621	1745	1891	2004	2019
25°	2409	2383	2221	2019	1887	1861	1884	1996	2173	2319	2338
27.5°	2694	2664	2469	2255	2139	2090	2128	2233	2420	2600	2627
30°	3024	2983	2739	2480	2371	2323	2360	2462	2687	2908	2934
32.5°	3377	3336	3039	2758	2578	2525	2563	2735	2983	3250	3283
35°	3752	3704	3366	3047	2814	2713	2799	3017	3298	3602	3644
37.5°	4135	4071	3692	3332	3051	2946	3036	3295	3617	3951	4004
40°	4525	4454	4049	3644	3310	3208	3295	3602	3959	4315	4364
42.5°	4833	4769	4375	3959	3595	3460	3576	3910	4285	4623	4668
45°	5156	5092	4717	4266	3884	3745	3861	4218	4619	4934	4979
47.5°	5591	5523	5159	4649	4191	4064	4169	4604	5062	5366	5407
50°	6131	6083	5734	5167	4593	4413	4570	5129	5644	5925	5955
52.5°	6694	6660	6383	5779	5114	4848	5107	5749	6278	6495	6507
55°	7182	7163	6979	6386	5726	5433	5726	6360	6867	6994	6991
57.5°	7587	7587	7471	6927	6296	6045	6289	6889	7343	7396	7373
60°	7910	7932	7865	7347	6743	6507	6732	7310	7734	7730	7696
62.5°	8210	8233	8184	7651	7032	6784	7024	7617	8053	8030	7985
65°	8435	8469	8424	7854	7174	6904	7167	7820	8293	8259	8210
67.5°	8578	8619	8559	7936	7182	6878	7186	7902	8424	8390	8341
70°	8638	8679	8589	7899	7066	6720	7073	7854	8450	8447	8394
72.5°	8578	8608	8454	7689	6811	6439	6829	7659	8323	8371	8319
75°	8330	8356	8135	7325	6409	6023	6432	7298	8015	8128	8083
77.5°	7917	7932	7636	6795	5861	5471	5887	6762	7523	7715	7685
80°	7325	7317	6942	6083	5163	4799	5193	6053	6844	7114	7099
82.5°	6559	6533	6105	5253	4379	4034	4409	5223	6008	6345	6353
85°	5591	5550	5096	4308	3553	3246	3572	4289	5017	5388	5415
87.5°	4548	4503	4064	3385	2754	2495	2769	3373	4000	4353	4390
90°	3415	3370	3009	2499	2038	1846	2049	2499	2987	3272	3313
95°	1621	1595	1448	1261	1096	1021	1096	1268	1456	1568	1595
105°	398	398	398	409	432	439	435	424	409	405	413
115°	345	345	323	319	315	315	319	319	323	345	349
125°	263	259	244	221	221	233	225	229	251	266	266
135°	300	296	270	221	165	139	169	225	274	296	300
145°	113	113	101	75	45	38	45	75	94	105	105
155°	8	8	4	0	0	0	0	0	4	8	8
165°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: 768326
CATALOG NUMBER: UTR85QLXX33

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
175°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: 768326

CATALOG NUMBER: UTR85QLXX33

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	938	938	938	938	938	938	938	938	938	938
2.5°	923	923	927	931	931	934	938	938	942	938
5°	904	908	908	916	919	923	923	927	934	938
7.5°	901	901	901	908	908	912	916	919	927	931
10°	942	942	931	923	919	923	934	953	968	968
12.5°	1058	1047	1021	987	964	979	1009	1043	1062	1073
15°	1212	1189	1137	1081	1043	1058	1103	1159	1201	1208
17.5°	1426	1381	1298	1201	1152	1178	1261	1340	1388	1403
20°	1696	1617	1493	1373	1321	1355	1441	1553	1632	1644
22.5°	2008	1891	1730	1580	1542	1550	1655	1797	1910	1921
25°	2319	2169	1966	1835	1786	1786	1872	2038	2180	2206
27.5°	2600	2409	2195	2075	2011	2008	2079	2251	2428	2454
30°	2901	2672	2420	2296	2221	2218	2278	2473	2683	2717
32.5°	3235	2964	2675	2492	2402	2402	2507	2724	2968	3009
35°	3591	3276	2957	2705	2570	2604	2765	3009	3295	3340
37.5°	3932	3576	3223	2923	2773	2818	3024	3302	3614	3670
40°	4289	3906	3516	3163	3017	3062	3302	3606	3944	4008
42.5°	4597	4225	3812	3426	3250	3325	3598	3925	4270	4338
45°	4904	4555	4113	3707	3516	3606	3910	4266	4593	4660
47.5°	5332	4979	4473	4008	3824	3902	4278	4683	5002	5066
50°	5884	5550	4976	4394	4169	4304	4773	5220	5535	5591
52.5°	6454	6173	5580	4912	4604	4826	5366	5839	6098	6139
55°	6949	6750	6188	5520	5193	5430	5981	6420	6600	6634
57.5°	7347	7227	6709	6090	5816	6004	6507	6908	7024	7047
60°	7677	7606	7122	6540	6296	6458	6938	7295	7358	7370
62.5°	7970	7910	7415	6833	6589	6754	7250	7610	7655	7655
65°	8195	8139	7606	6979	6717	6912	7460	7861	7902	7895
67.5°	8330	8255	7681	6987	6698	6942	7553	8011	8068	8060
70°	8383	8274	7632	6871	6537	6848	7535	8056	8143	8135
72.5°	8304	8143	7441	6623	6259	6615	7385	7962	8090	8083
75°	8060	7839	7096	6225	5850	6229	7066	7704	7876	7880
77.5°	7651	7362	6574	5696	5317	5707	6552	7235	7478	7482
80°	7058	6705	5895	5032	4675	5069	5887	6608	6904	6919
82.5°	6304	5906	5107	4293	3955	4338	5103	5797	6120	6146
85°	5355	4946	4214	3508	3216	3561	4240	4886	5212	5246
87.5°	4338	3959	3332	2750	2510	2803	3373	3944	4244	4278
90°	3272	2964	2484	2053	1876	2113	2552	3006	3246	3272
95°	1576	1452	1268	1111	1032	1137	1313	1508	1621	1629
105°	409	409	417	443	432	424	409	390	379	383
115°	341	319	311	311	304	300	315	300	319	323
125°	266	244	221	218	221	214	214	229	240	248
135°	296	270	221	158	131	161	214	259	281	285
145°	105	94	75	45	38	45	68	86	98	98
155°	8	4	0	0	0	0	0	4	8	8
165°	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: 768326

CATALOG NUMBER: UTR85QLXX33

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
175°	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)