

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: LUMARK

Report Number: 767386

Luminaire Tested: **HPRC-FL-3-250**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 767386
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: HPRC-FL-3-250
Description: 250W HPS TYPE III ROADWAY
Light Source: 250W HPS CL E-18
Ballast/Driver: -

Summary

Lumens per Lamp: 27500 (1 lamp)
Luminaire Lumens: 18829.1 lumens
Efficiency: 68.5%
Efficacy: 75.3 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Medium - Full Cutoff
BUG Rating: B3 - U0 - G3

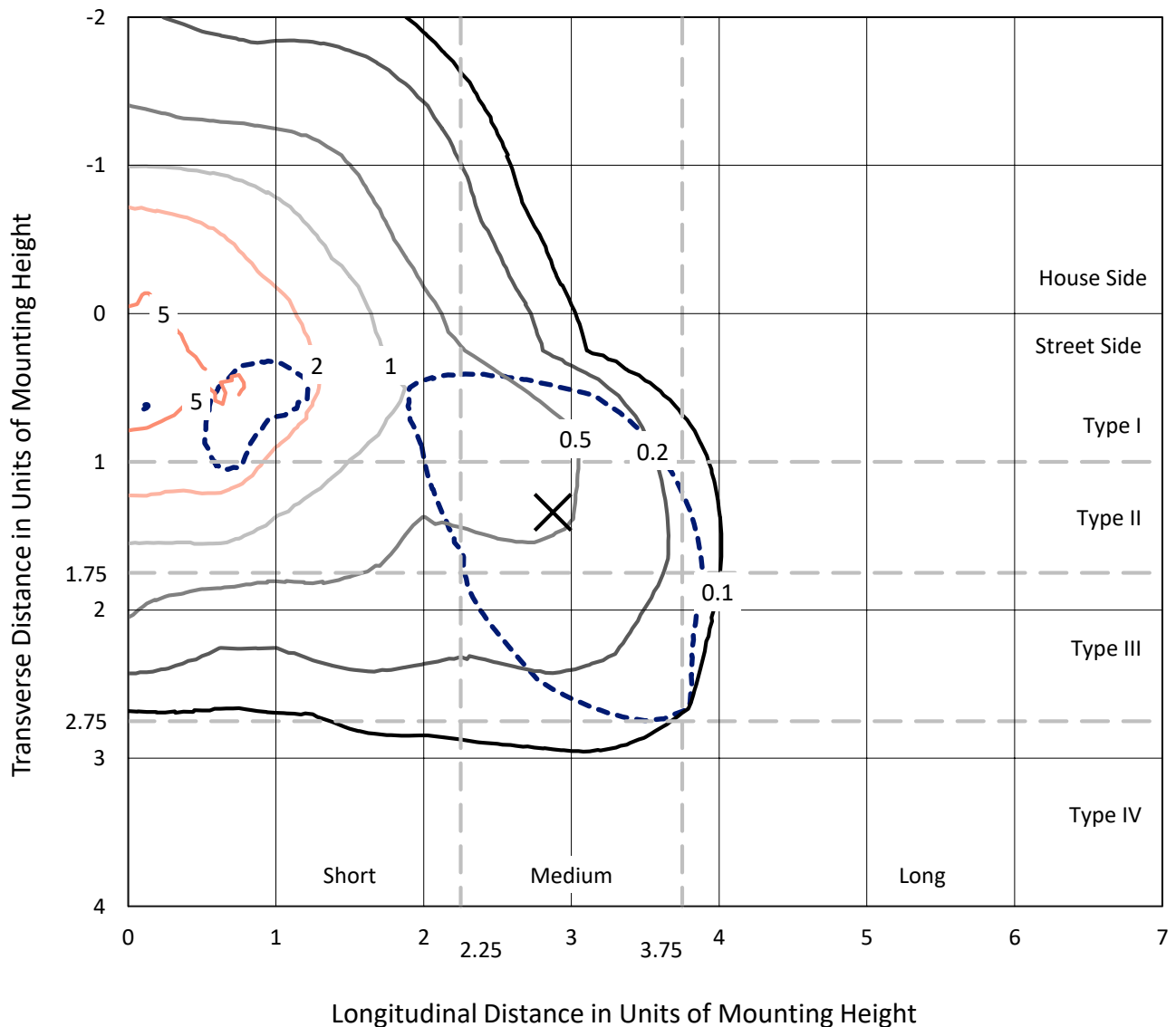
Input Watts (W): 250
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

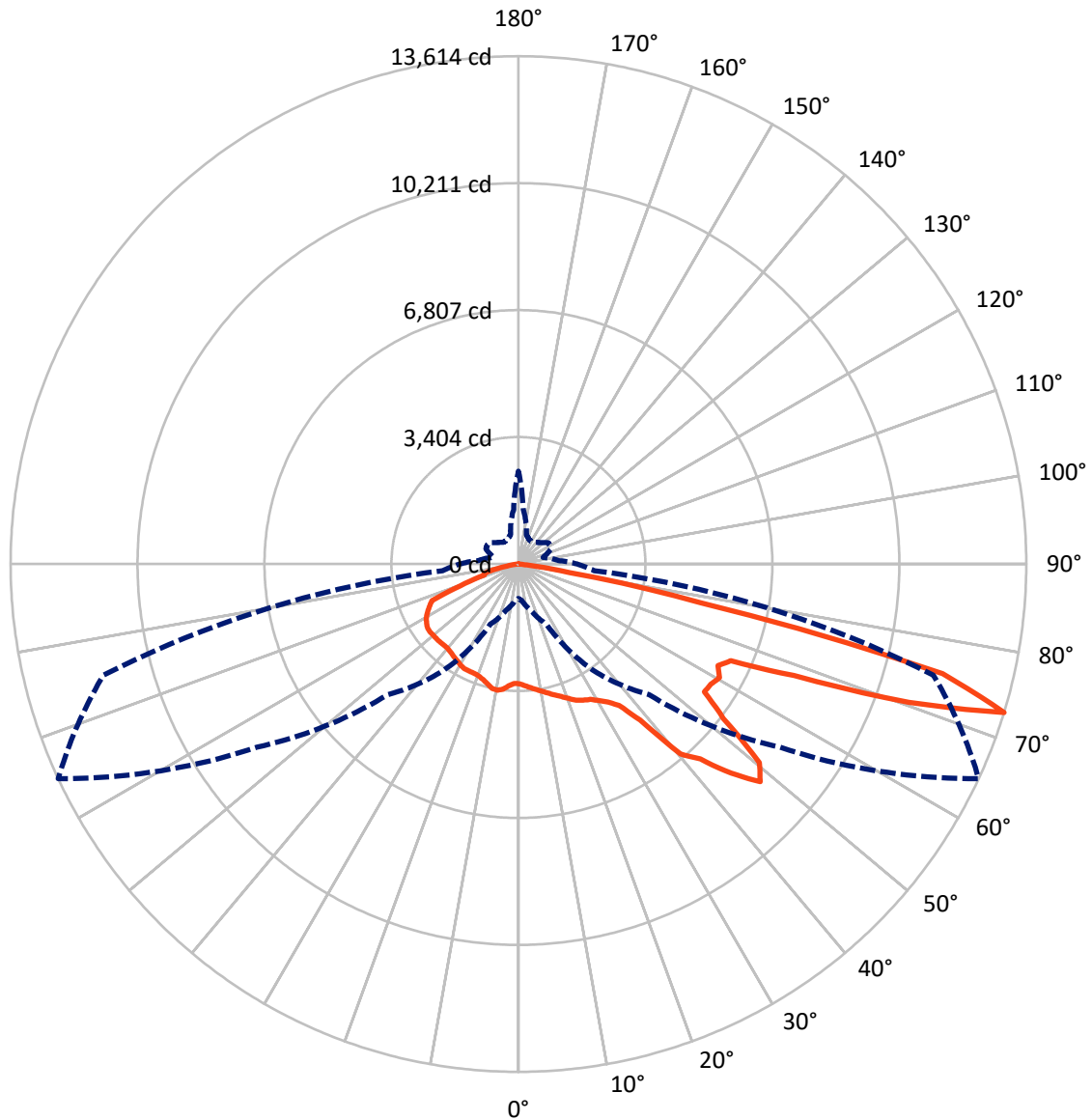
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type III - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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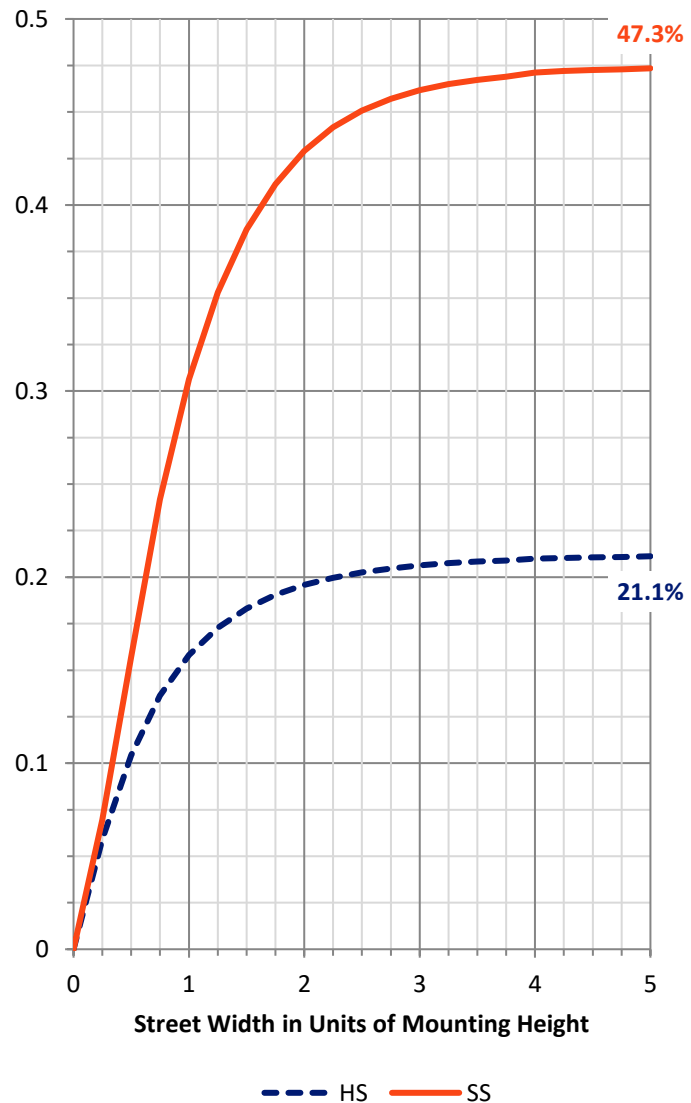
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5823.0	0.0	5823.0
	% Lamp	21.2	0.0	21.2
Street Side	Lumens	13006.1	0.0	13006.1
	% Lamp	47.3	0.0	47.3
Total	Lumens	18829.1	0.0	18829.1
	% Lamp	68.5	0.0	68.5

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	315.4	1.7	1.1
10°-20°	1017.9	5.4	3.7
20°-30°	1863.9	9.9	6.8
30°-40°	2625.3	13.9	9.5
40°-50°	3453.0	18.3	12.6
50°-60°	3554.7	18.9	12.9
60°-70°	3440.7	18.3	12.5
70°-80°	2438.5	13.0	8.9
80°-90°	119.7	0.6	0.4
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	18829.1	100.0	68.5
0°-180°	18829.1	100.0	68.5



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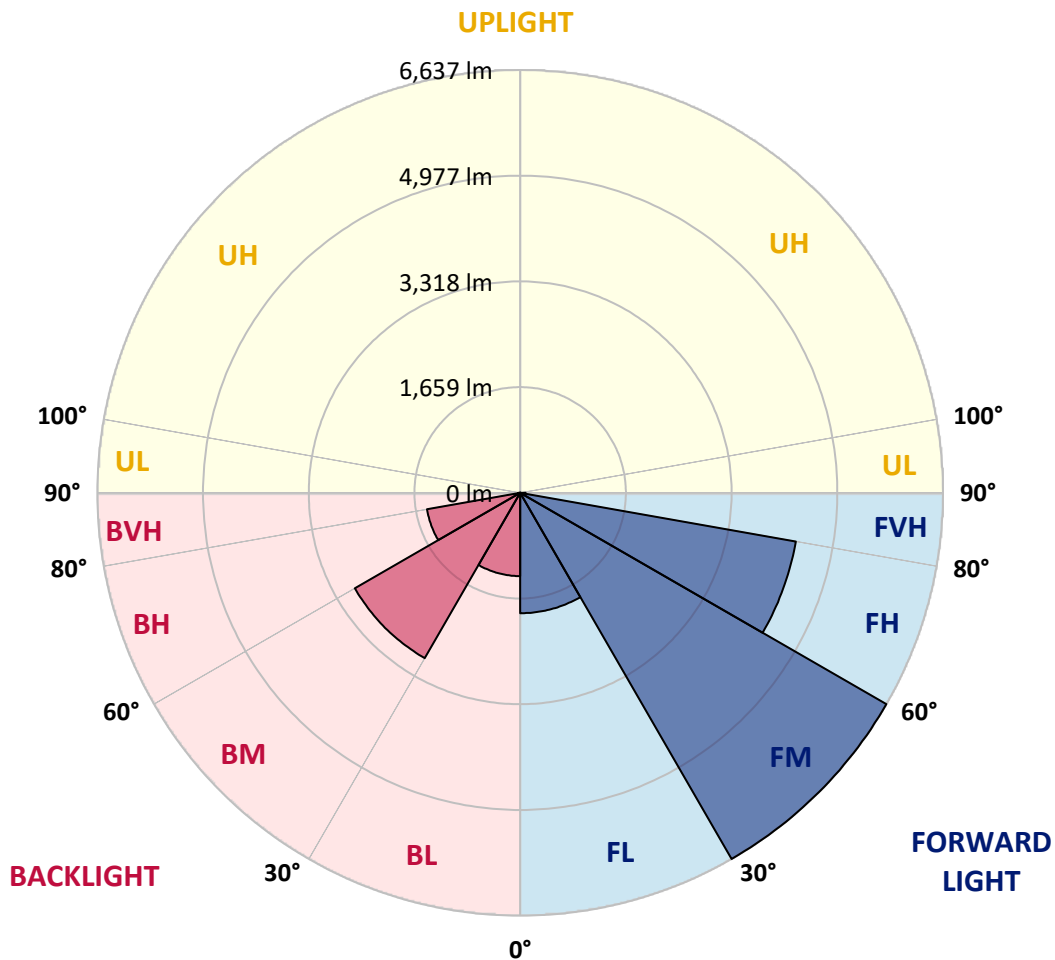
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1889.9	6.9			
FM	(30°-60°)	6636.6	24.1			
FH	(60°-80°)	4393.9	16.0			G2/5000
FVH	(80°-90°)	85.7	0.3			G1/100
BL	(0°-30°)	1307.3	4.8	B3/2500		
BM	(30°-60°)	2996.4	10.9	B3/5000		
BH	(60°-80°)	1485.4	5.4	B3/2500		G3/2500
BVH	(80°-90°)	34.0	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		8670.9	31.5			

BUG Rating: B3-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3209	3209	3209	3209	3209	3209	3209	3209	3209	3209	3209
2.5°	3107	3306	3205	3293	3302	3298	3277	3264	3247	3141	3226
5°	3183	3387	3289	3378	3387	3365	3348	3327	3315	3217	3298
7.5°	3310	3518	3420	3505	3492	3467	3429	3395	3370	3277	3357
10°	3480	3687	3598	3670	3645	3586	3526	3467	3425	3315	3395
12.5°	3734	3941	3827	3882	3810	3721	3632	3552	3471	3336	3404
15°	4106	4314	4280	4157	4030	3890	3755	3641	3535	3450	3416
17.5°	4741	4944	4822	4572	4322	4081	3890	3738	3598	3484	3433
20°	5478	5685	5546	5198	4762	4301	4030	3848	3679	3547	3484
22.5°	5952	6219	6032	5783	5334	4627	4170	3962	3772	3560	3543
25°	6214	6511	6274	6155	5808	5016	4305	4043	3878	3641	3611
27.5°	6418	6710	6422	6354	6007	5296	4487	4110	3950	3674	3632
30°	6562	6803	6549	6375	6028	5431	4779	4246	3983	3674	3619
32.5°	6612	6790	6587	6350	5973	5567	5203	4411	4009	3687	3602
35°	6587	6701	6494	6210	5821	5774	5592	4652	4246	3818	3632
37.5°	6494	6553	6248	5990	5812	6159	6333	5304	4771	3988	3674
40°	6350	6363	5893	5732	6054	6904	7506	6697	5169	4191	3844
42.5°	6113	6121	5677	5749	6633	7726	8221	7146	5812	4348	3996
45°	5816	5855	5427	5787	7260	7984	7810	8001	5872	4415	4110
47.5°	5469	5537	5181	5821	7480	7459	7158	8720	5503	4508	4254
50°	5071	5173	4974	5931	7239	6629	6456	8373	5520	4614	4407
52.5°	4657	4758	4741	5956	6655	5969	6151	6879	5584	4834	4559
55°	4233	4314	4496	5774	5969	5461	6041	6049	5816	4923	4678
57.5°	3818	3827	4233	5308	5300	5143	5872	6083	6261	4856	4572
60°	3590	3361	3818	4568	4614	4957	5491	6189	6041	4610	4288
62.5°	3742	3162	3200	3797	4348	4961	4987	5999	6371	4390	4153
65°	3666	3183	2421	3069	4530	5431	4936	6253	7882	4394	4017
67.5°	2252	2235	1892	2485	4572	5575	5457	7971	9267	4271	3840
70°	1270	1363	1558	2108	4077	5186	6506	11104	10710	3501	2997
72.5°	923	982	1283	1782	3463	4949	8560	13614	11514	2036	1571
75°	601	660	868	1329	2548	5054	9918	11743	6633	1245	893
77.5°	296	334	466	698	1236	4813	7290	4999	2612	847	597
80°	42	72	140	195	326	2739	2299	1380	821	432	334
82.5°	0	21	21	51	63	246	271	271	203	157	140
85°	0	4	4	8	8	30	38	42	42	34	30
87.5°	0	0	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3209	3209	3209	3209	3209	3209	3209	3209	3209	3209
2.5°	3226	3209	3205	3196	3183	3179	3082	3162	3086	3133
5°	3298	3289	3272	3154	3188	3162	3048	3124	3044	3090
7.5°	3370	3391	3382	3272	3251	3175	3027	3099	3001	3048
10°	3404	3425	3429	3353	3323	3217	3018	3061	2959	3006
12.5°	3395	3399	3408	3374	3353	3243	3014	3035	2925	2972
15°	3391	3344	3315	3319	3357	3251	3014	3001	2908	2955
17.5°	3399	3298	3238	3213	3293	3243	2993	2951	2908	2946
20°	3420	3293	3183	3095	3192	3183	2946	2883	2904	2955
22.5°	3471	3315	3158	3018	3065	3103	2900	2798	2879	2972
25°	3535	3340	3158	2993	2972	2963	2798	2714	2832	2972
27.5°	3543	3344	3158	2989	2896	2828	2680	2620	2785	2904
30°	3539	3327	3128	2993	2857	2730	2595	2523	2654	2785
32.5°	3514	3298	3073	2946	2815	2658	2519	2434	2481	2591
35°	3497	3247	3035	2900	2764	2587	2438	2328	2316	2345
37.5°	3518	3200	2989	2853	2697	2519	2358	2227	2167	2159
40°	3590	3188	2955	2798	2629	2430	2218	2108	2019	2007
42.5°	3691	3221	2951	2760	2561	2341	2100	1977	1880	1871
45°	3873	3323	2963	2747	2510	2252	1994	1846	1744	1727
47.5°	4051	3437	2972	2735	2472	2189	1892	1723	1630	1626
50°	4229	3467	2972	2730	2430	2117	1795	1613	1545	1532
52.5°	4326	3395	2984	2735	2396	2053	1710	1520	1520	1532
55°	4369	3310	2984	2773	2392	1994	1634	1477	1575	1626
57.5°	4119	3205	2934	2785	2388	1930	1558	1448	1583	1659
60°	3755	3103	2866	2769	2392	1880	1477	1410	1482	1592
62.5°	3569	2921	2760	2701	2375	1854	1418	1350	1410	1592
65°	3395	2701	2642	2608	2316	1841	1397	1291	1469	1812
67.5°	3175	2498	2519	2460	2176	1782	1393	1257	1689	2303
70°	2324	1642	1664	1668	1583	1439	1219	1135	1740	2684
72.5°	1071	682	961	986	809	711	703	813	1469	2489
75°	673	656	957	961	690	525	491	563	995	1558
77.5°	483	559	715	703	495	343	288	339	546	703
80°	284	305	347	351	258	178	131	178	246	288
82.5°	123	119	123	127	97	72	38	80	106	119
85°	25	25	25	25	25	17	8	25	34	34
87.5°	0	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)