

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: McGRAW-EDISON

Report Number: ITL54986

Luminaire Tested: **GSM-XX-400-HPS-XX-SL-FG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: ITL54986  
Test Lab: INDEPENDENT TESTING LABORATORIES, INC.  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GSM-XX-400-HPS-XX-SL-FG  
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE - WITH SPILL LIGHT ELIMINATOR  
Light Source: 400 WATT HPS CLEAR E-18  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 50000 (1 lamp)  
Luminaire Lumens: 29289.8 lumens  
Efficiency: 58.6%  
Efficacy: 73.2 lumens/watt  
Luminous Opening: Rectangular (W 1.01' x L: 0.99' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G4

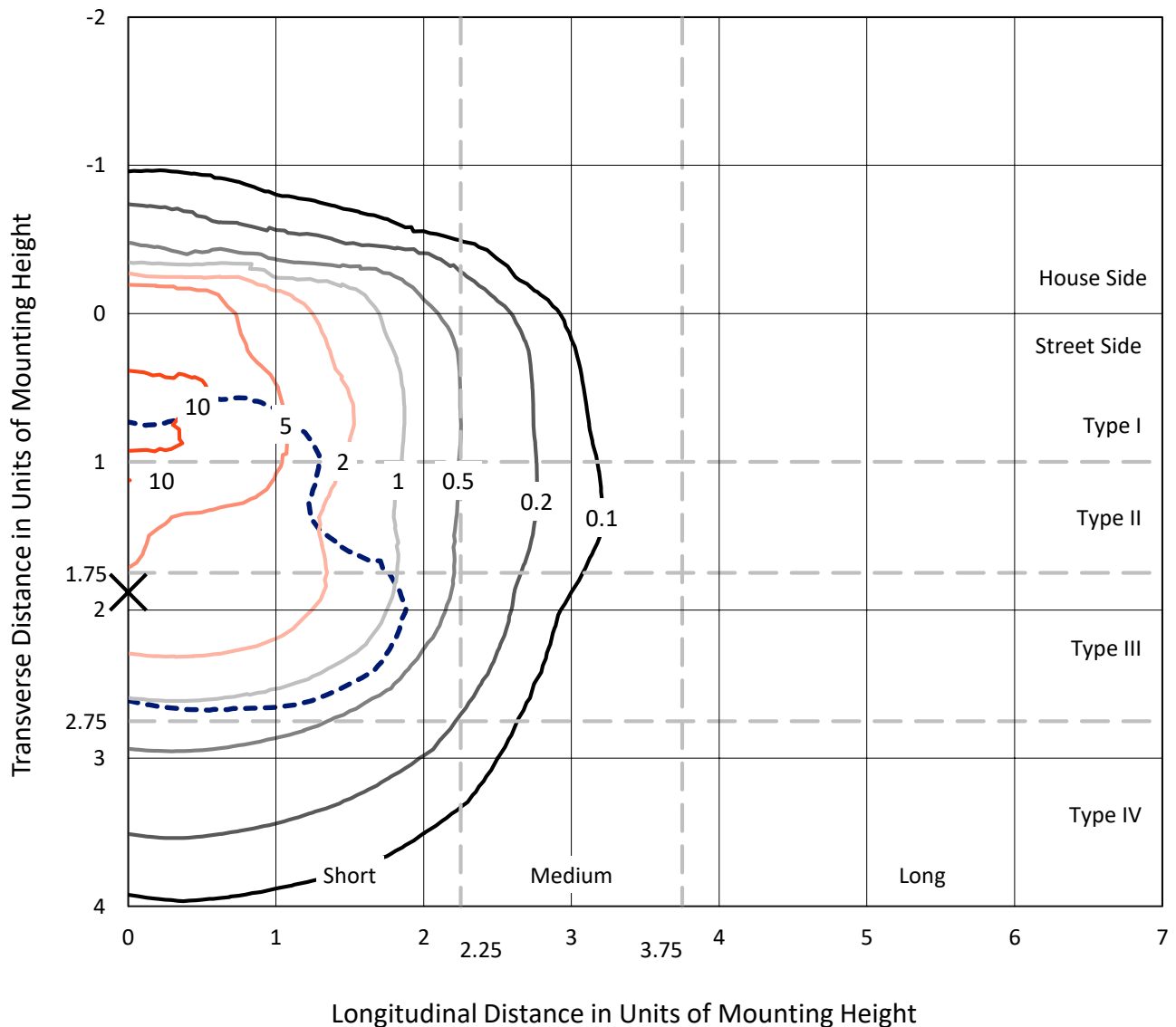
Input Watts (W): 400  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: ITL54986  
 CATALOG NUMBER: GSM-XX-400-HPS-XX-SL-FG

### Iso-Footcandle Lines of Horizontal Illumination

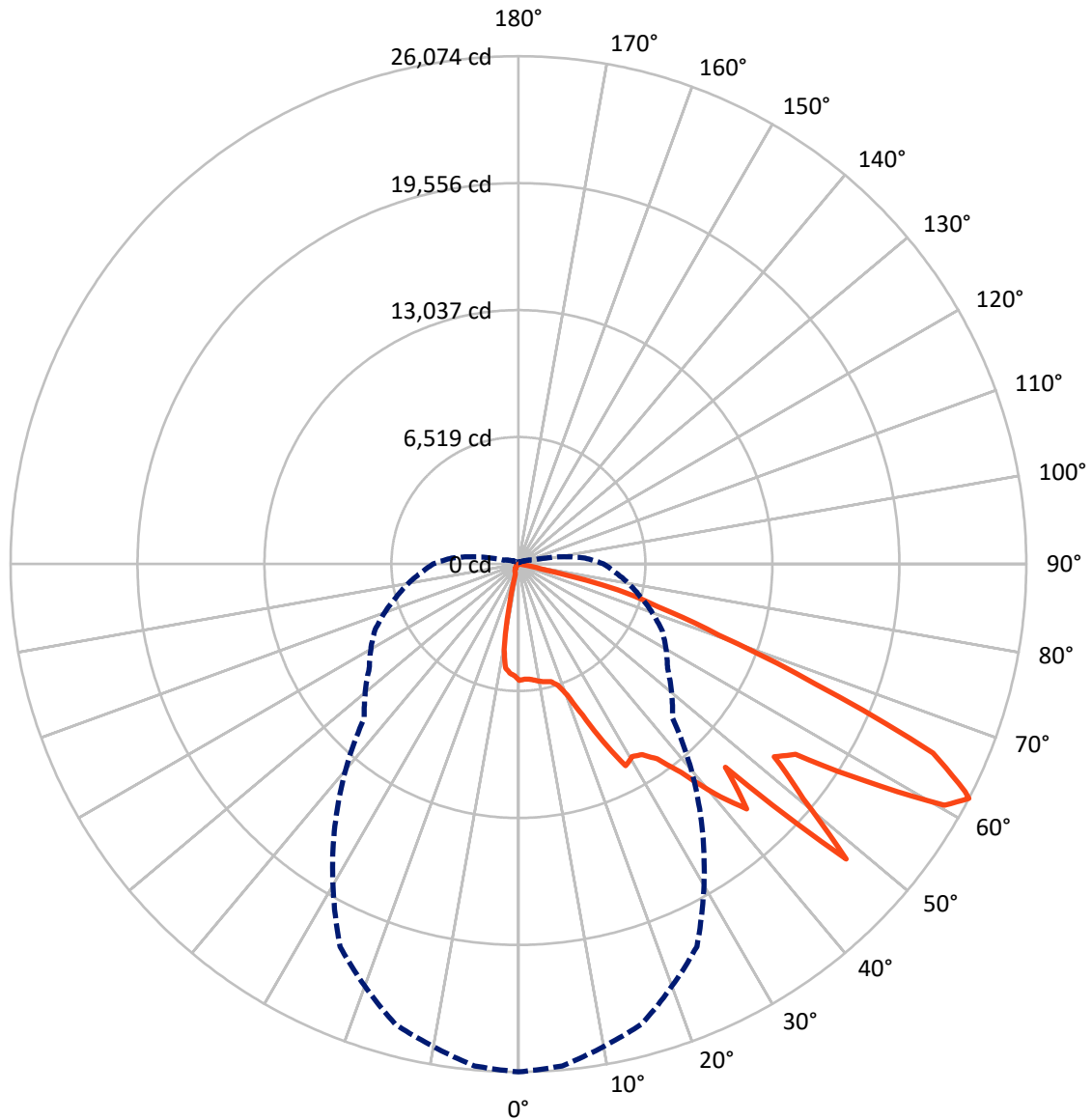
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.7 fc  
 Type III - Short - Full Cutoff

REPORT NUMBER: ITL54986  
CATALOG NUMBER: GSM-XX-400-HPS-XX-SL-FG

### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 62-Deg Vertical

REPORT NUMBER: ITL54986

CATALOG NUMBER: GSM-XX-400-HPS-XX-SL-FG

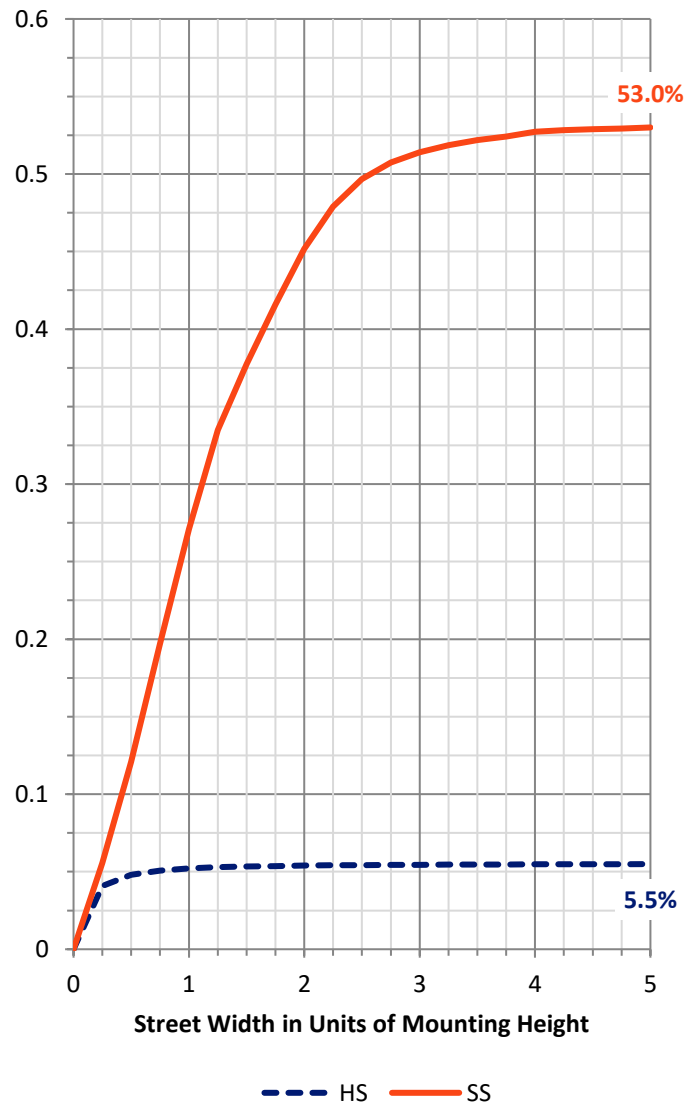
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2775.4	0.0	2775.4
	% Lamp	5.6	0.0	5.6
<b>Street Side</b>	Lumens	26514.4	0.0	26514.4
	% Lamp	53.0	0.0	53.0
<b>Total</b>	Lumens	29289.8	0.0	29289.8
	% Lamp	58.6	0.0	58.6

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	554.0	1.9	1.1
10°-20°	1394.5	4.8	2.8
20°-30°	2273.9	7.8	4.5
30°-40°	3636.3	12.4	7.3
40°-50°	5514.0	18.8	11.0
50°-60°	6640.2	22.7	13.3
60°-70°	6899.7	23.6	13.8
70°-80°	2273.7	7.8	4.5
80°-90°	103.6	0.4	0.2
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°	29289.8	100.0	58.6
0°-180°	29289.8	100.0	58.6



REPORT NUMBER: ITL54986

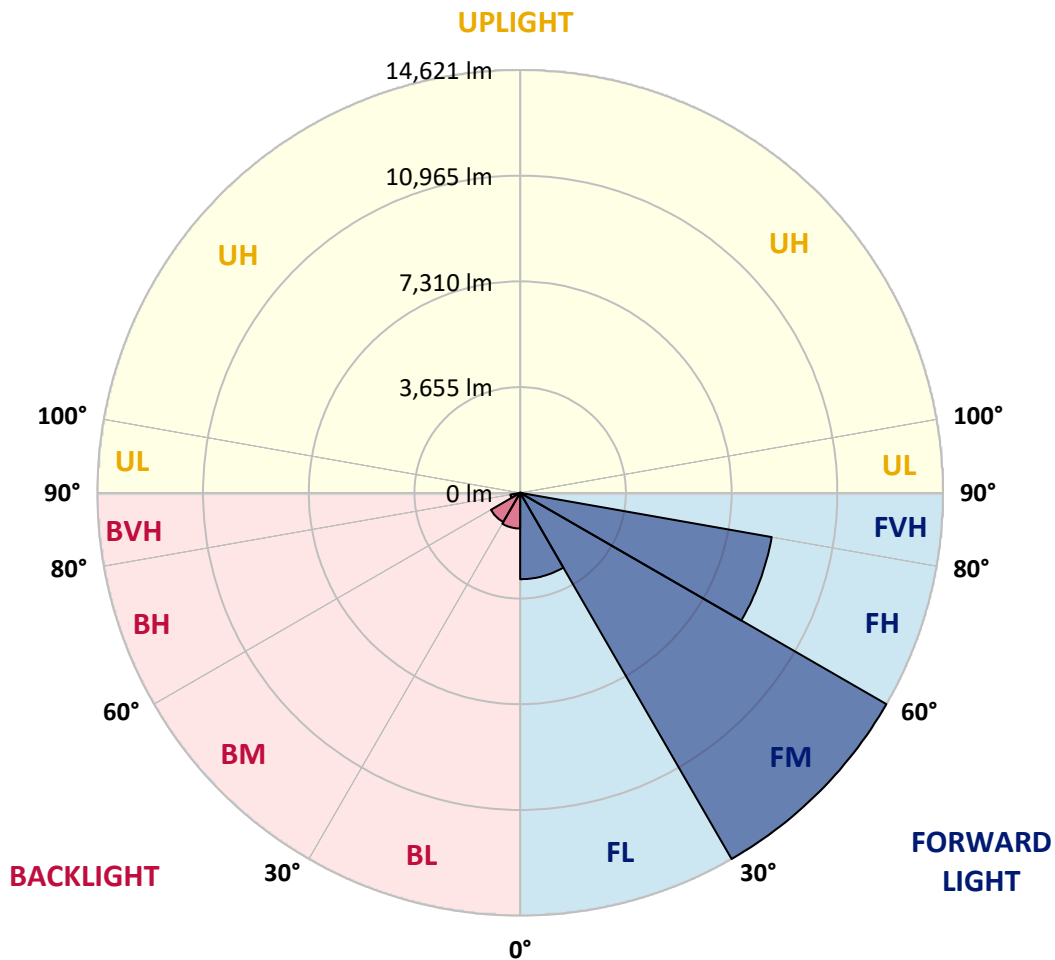
CATALOG NUMBER: GSM-XX-400-HPS-XX-SL-FG

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2986.9	6.0			
FM	(30°-60°)	14620.6	29.2			
FH	(60°-80°)	8830.1	17.7			G4/12000
FVH	(80°-90°)	76.7	0.2			G1/100
BL	(0°-30°)	1235.5	2.5	B3/2500		
BM	(30°-60°)	1169.8	2.3	B2/2500		
BH	(60°-80°)	343.2	0.7	B1/500		G1/500
BVH	(80°-90°)	26.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		20710.2	41.4			

**BUG Rating: B3-U0-G4**

Type III Short





REPORT NUMBER: ITL54986

CATALOG NUMBER: GSM-XX-400-HPS-XX-SL-FG

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5977	5977	5977	5977	5977	5977	5977	5977	5977	5977	5977
2.5°	5920	5937	5946	5954	5963	5989	6006	6006	6032	6119	6032
5°	5937	5946	5963	5963	5954	5972	5980	5998	6076	5972	5963
7.5°	6024	6015	6024	6015	5998	6006	5980	5972	5989	5928	5911
10°	6128	6137	6145	6128	6093	6076	6024	6076	5972	5920	5902
12.5°	6197	6189	6215	6215	6189	6163	6145	6058	5989	5928	5894
15°	6267	6275	6310	6284	6232	6258	6406	6249	6093	5946	5894
17.5°	6545	6466	6440	6397	6336	6406	6545	6545	6241	6006	5902
20°	7169	7039	6874	6727	6562	6597	6675	6770	6449	6111	5954
22.5°	8419	8185	7803	7300	7013	6788	6692	6805	6614	6189	6050
25°	10068	9704	9027	8089	7690	7465	6909	6735	6571	6111	6015
27.5°	11735	11535	10867	9539	8628	8541	7638	6788	6414	5963	5859
30°	11475	11518	11396	11093	10095	9548	8706	7109	6432	5928	5807
32.5°	11666	11561	11284	11223	11683	10667	9548	7577	6588	6006	5867
35°	12290	12186	11856	11631	12091	11891	10086	7968	6701	6050	5928
37.5°	13558	13245	12759	12473	12620	12664	10355	8263	6692	5963	5885
40°	15502	15172	14495	13566	13636	13106	10997	8497	6571	5763	5720
42.5°	17186	17316	16873	15467	14782	14452	12152	8897	6475	5581	5503
45°	14894	14087	14617	17785	16865	16222	13115	9834	6518	5520	5338
47.5°	22637	22255	19417	14582	19573	18080	13410	10398	6761	5598	5225
50°	18957	19764	21265	22090	17116	19903	13679	10173	7083	5624	5138
52.5°	16439	16839	17047	19885	22793	20007	13471	10077	7039	5546	5086
55°	17255	16908	15502	16439	21118	17125	13271	10181	6796	5486	5052
57.5°	21040	19816	16873	15276	16925	17021	12915	10103	6744	5355	4965
60°	25136	24130	20831	17533	15025	13176	10615	9261	6727	5147	4730
62°	26074	25866	24451	21673	16422	11188	9348	8150	6475	5000	4375
62.5°	25744	25735	24911	22880	16917	10824	9122	7907	6371	4973	4270
65°	23383	24321	25180	25024	19833	10737	8905	7143	5711	4756	3810
67.5°	16422	18054	20970	22645	19937	13401	8428	6058	4756	4053	3177
70°	10902	11483	12976	15467	16092	12377	7022	4826	3663	2934	2265
72.5°	7517	7855	8298	8836	9444	7647	4835	3889	2543	1727	1276
75°	5277	5668	5789	5920	5581	3871	2370	2691	1814	1120	738
77.5°	1111	1875	2300	3003	2708	1580	851	1371	903	547	391
80°	382	434	417	382	391	538	356	599	599	286	252
82.5°	191	226	226	182	174	148	182	200	286	182	165
85°	52	69	78	78	87	87	95	113	130	122	104
87.5°	0	17	17	35	52	52	61	69	78	69	69
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: ITL54986

CATALOG NUMBER: GSM-XX-400-HPS-XX-SL-FG

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5977	5977	5977	5977	5977	5977	5977	5977	5977	5977
2.5°	6006	5980	5920	5885	5850	5798	5772	5746	5729	5746
5°	5946	5902	5841	5772	5711	5668	5633	5624	5598	5607
7.5°	5894	5833	5746	5668	5590	5529	5451	5373	5303	5381
10°	5876	5772	5677	5572	5442	5173	4843	4522	4314	4444
12.5°	5841	5711	5590	5442	4947	4192	3342	2578	2231	2482
15°	5815	5642	5503	5017	3906	2404	1467	1024	859	937
17.5°	5781	5572	5338	4262	2300	1111	686	573	556	573
20°	5807	5520	4982	2960	1154	625	547	503	486	486
22.5°	5867	5512	4401	1684	651	529	477	451	451	451
25°	5859	5486	3524	963	556	469	425	425	417	434
27.5°	5737	5355	2456	651	495	425	417	391	382	399
30°	5659	5086	1632	625	469	408	382	347	312	330
32.5°	5677	4739	1137	625	434	356	330	278	269	278
35°	5694	4279	929	642	382	304	286	260	243	260
37.5°	5616	3637	920	634	321	278	243	234	217	226
40°	5416	2838	859	512	286	252	226	208	191	191
42.5°	5156	2074	772	408	278	243	208	191	182	174
45°	4887	1528	668	330	260	226	191	174	156	156
47.5°	4635	1180	582	295	252	208	174	156	148	156
50°	4461	1085	512	286	243	200	165	148	139	139
52.5°	4349	1085	477	295	226	191	156	139	122	122
55°	4322	1007	451	295	208	174	139	104	78	87
57.5°	4218	851	434	286	208	156	122	95	61	69
60°	3906	772	425	252	182	148	122	95	69	69
62°	3437	772	408	234	165	148	122	95	69	69
62.5°	3290	764	399	226	156	148	122	95	69	69
65°	2561	651	339	182	148	139	122	95	61	69
67.5°	1910	512	269	148	139	130	122	95	69	69
70°	1198	399	208	130	122	122	113	87	61	69
72.5°	720	330	174	113	113	104	104	87	61	69
75°	460	278	139	104	95	104	95	78	61	52
77.5°	339	191	113	87	78	87	78	69	43	52
80°	226	139	95	78	78	69	69	52	26	35
82.5°	148	104	78	61	61	52	52	35	26	17
85°	95	78	61	52	43	43	26	26	9	17
87.5°	69	61	43	43	26	26	26	9	0	0
90°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)