

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: HALO

Report Number: P407851

Luminaire Tested: **ALS10A40**

Issue Date: 08/27/2020

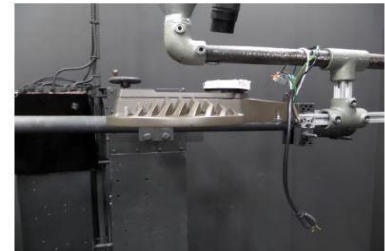
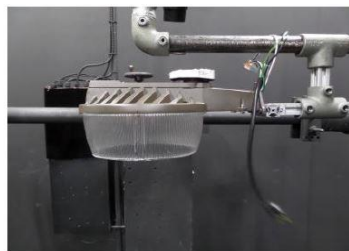
Test Information

Test Method: LM-79-08
Report Number: P407851
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2006-852-4)
Test Lab: INNOVATIONS CENTER(G1)
Issue Date: 08/27/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ALS10A40
Description: HALO OUTDOOR BARN LIGHT STANDARD 10000LM
Light Source: (102) 4000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10617 lumens
Efficiency: N/A
Efficacy: 137.9 lumens/watt
Luminous Opening: Circular (Dia: 0.67' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

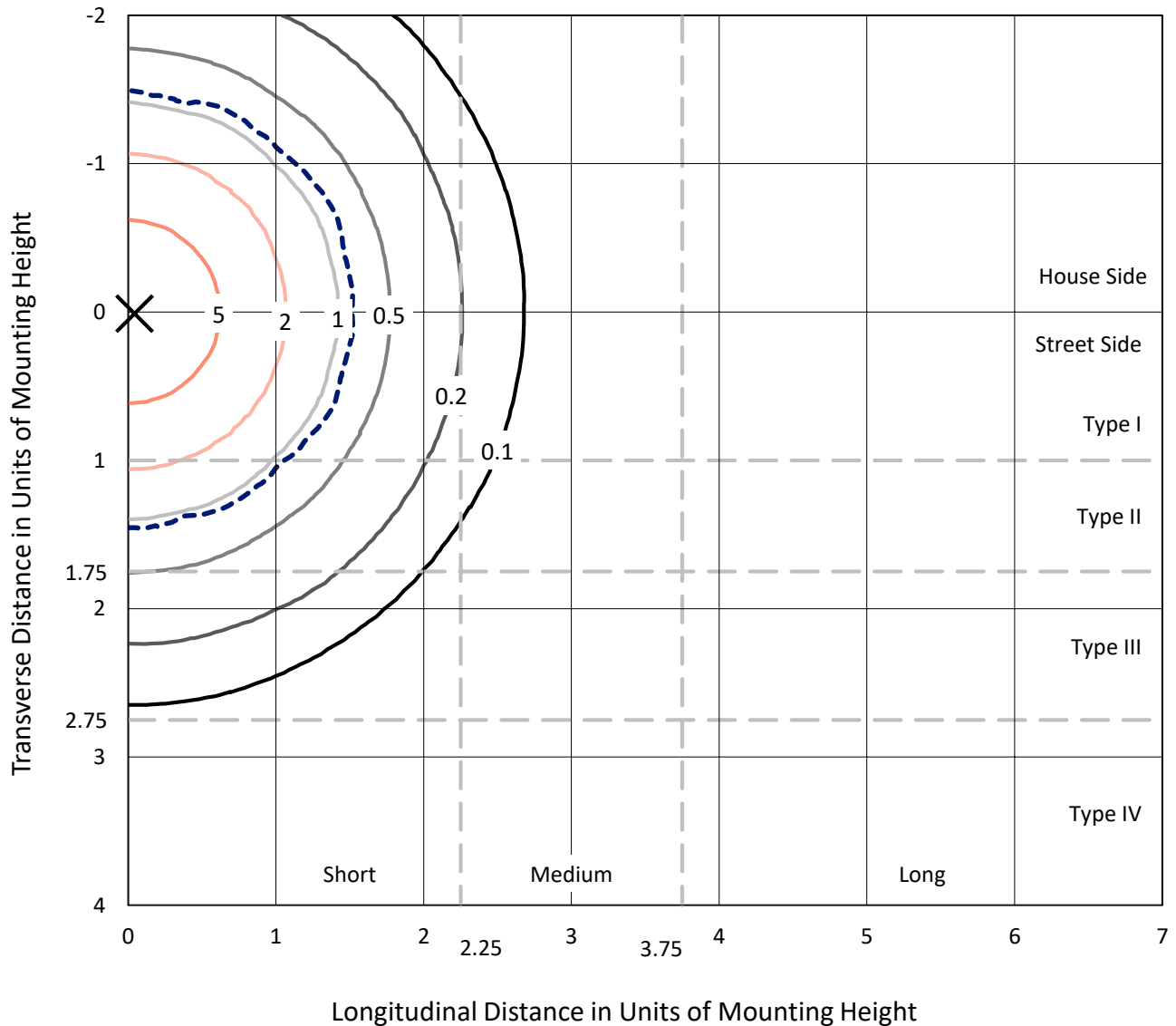
Input Watts (W): 77
Input Voltage (V): 120.0
Input Current (Ain): 0.647
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P407851
 CATALOG NUMBER: ALS10A40

Iso-Footcandle Lines of Horizontal Illumination

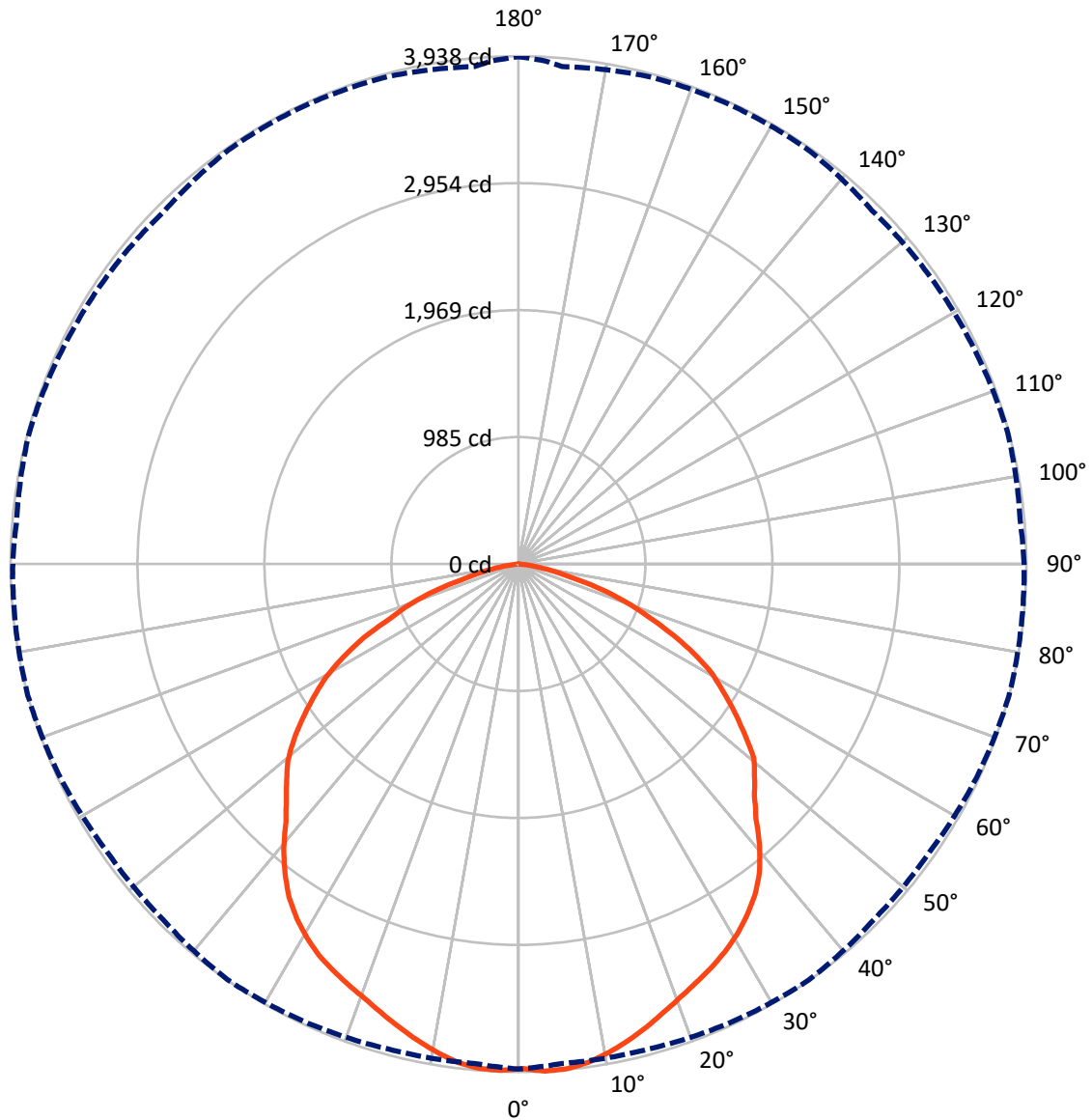
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9.8 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P407851
CATALOG NUMBER: ALS10A40

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 2.5-Deg Vertical

REPORT NUMBER: P407851
 CATALOG NUMBER: ALS10A40

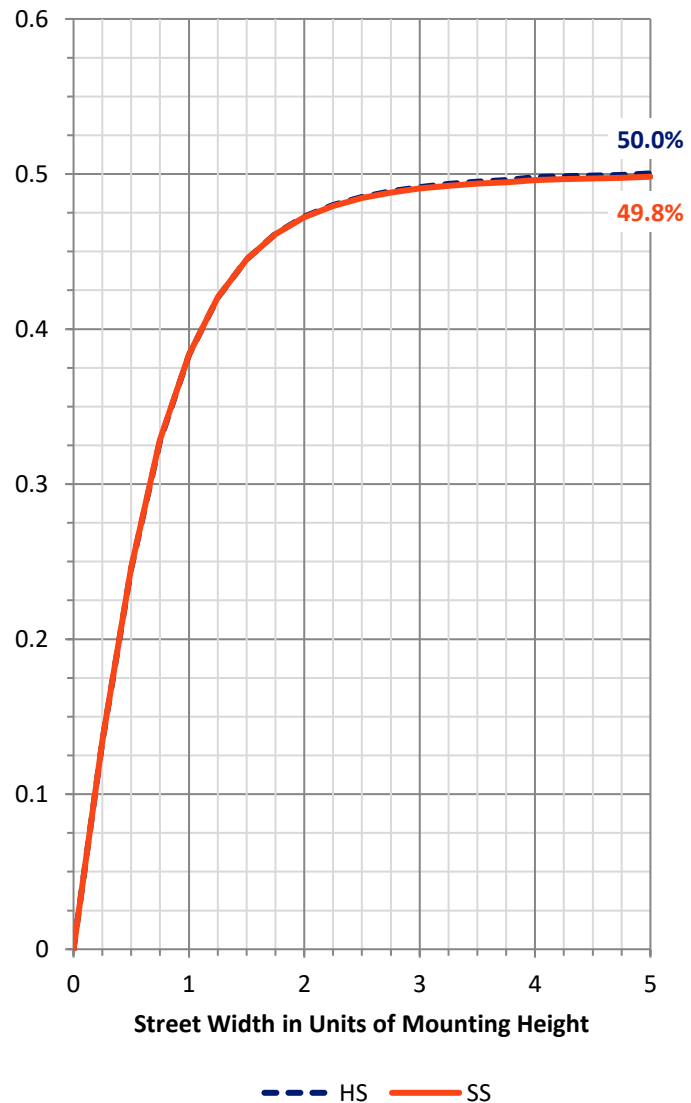
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5334.2	0.0	5334.2
	% Fixture	50.2	0.0	50.2
Street Side	Lumens	5282.8	0.0	5282.8
	% Fixture	49.8	0.0	49.8
Total	Lumens	10617.0	0.0	10617.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.1	3.5
10°-20°	1045.5	9.8
20°-30°	1590.3	15.0
30°-40°	1944.9	18.3
40°-50°	2000.9	18.8
50°-60°	1815.4	17.1
60°-70°	1282.1	12.1
70°-80°	512.8	4.8
80°-90°	54.9	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	10617.0	100.0
0°-180°	10617.0	100.0



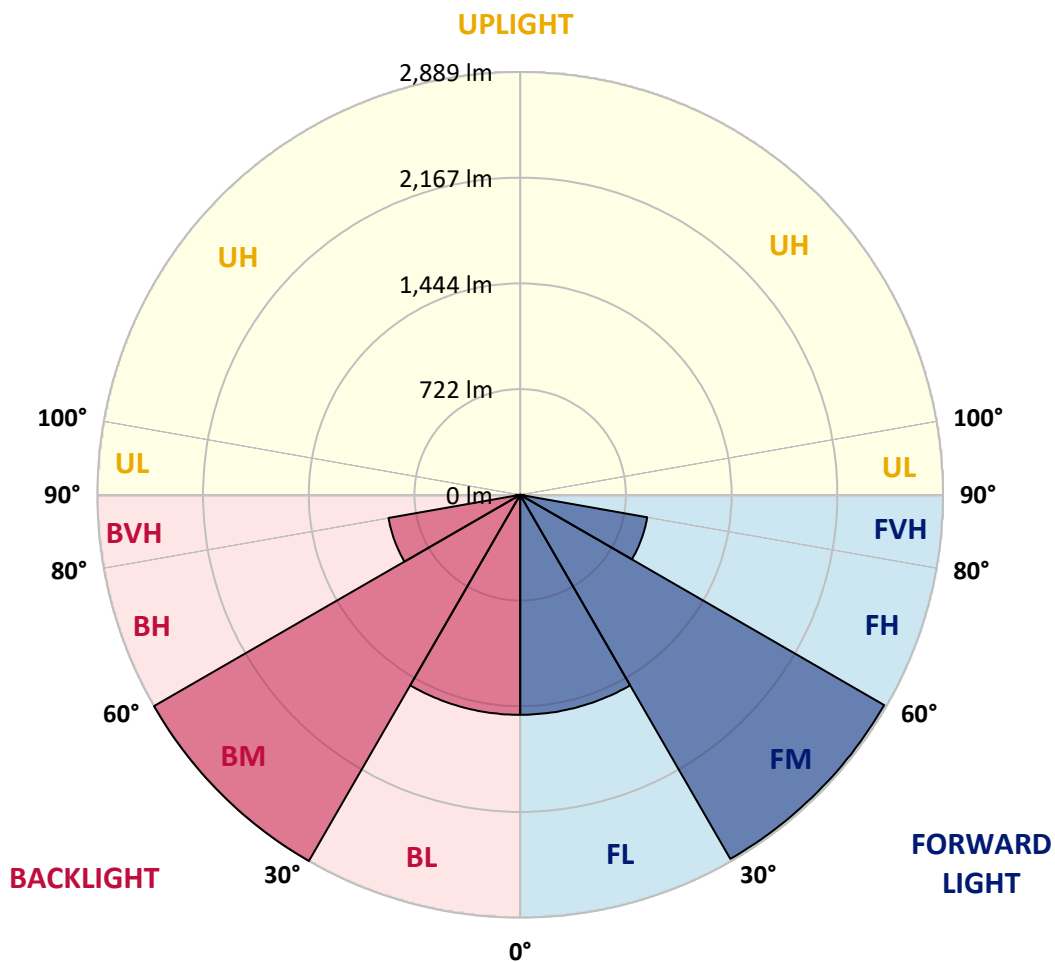
REPORT NUMBER: P407851
 CATALOG NUMBER: ALS10A40

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1502.8	14.2			
FM	(30°-60°)	2872.3	27.1			
FH	(60°-80°)	881.8	8.3			G1/1800
FVH	(80°-90°)	25.9	0.2			G1/100
BL	(0°-30°)	1503.2	14.2	B3/2500		
BM	(30°-60°)	2888.9	27.2	B3/5000		
BH	(60°-80°)	913.2	8.6	B2/1000		G1/1800
BVH	(80°-90°)	29.0	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





REPORT NUMBER: P407851
 CATALOG NUMBER: ALS10A40

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
2.5°	3916	3888	3894	3917	3934	3898	3892	3919	3938	3926	3921
5°	3905	3874	3882	3904	3926	3889	3884	3915	3932	3924	3912
7.5°	3877	3848	3857	3881	3902	3868	3860	3886	3902	3897	3885
10°	3842	3816	3821	3844	3860	3826	3811	3838	3851	3846	3830
12.5°	3783	3760	3769	3789	3803	3766	3755	3779	3792	3788	3768
15°	3715	3692	3701	3720	3731	3694	3690	3711	3724	3721	3700
17.5°	3635	3621	3625	3645	3654	3620	3616	3643	3653	3654	3630
20°	3563	3547	3553	3574	3583	3550	3545	3578	3586	3587	3557
22.5°	3490	3473	3485	3511	3518	3486	3481	3517	3526	3531	3502
25°	3418	3405	3423	3448	3454	3423	3421	3457	3469	3473	3440
27.5°	3363	3352	3367	3385	3386	3360	3360	3393	3407	3413	3381
30°	3290	3287	3301	3306	3300	3274	3281	3320	3336	3339	3299
32.5°	3215	3215	3223	3217	3202	3181	3188	3239	3252	3243	3199
35°	3143	3133	3122	3099	3105	3084	3080	3130	3156	3152	3108
37.5°	3021	3010	2998	2976	2991	2983	2963	2997	3036	3068	3032
40°	2857	2847	2823	2841	2888	2871	2858	2859	2880	2942	2902
42.5°	2667	2671	2675	2704	2773	2782	2771	2731	2701	2751	2721
45°	2521	2537	2556	2550	2602	2656	2618	2590	2566	2590	2556
47.5°	2436	2447	2451	2415	2404	2442	2435	2427	2464	2487	2445
50°	2345	2320	2312	2308	2278	2248	2283	2312	2366	2391	2344
52.5°	2163	2155	2128	2192	2174	2091	2170	2218	2197	2276	2229
55°	1971	1985	1952	2021	2008	1971	2029	2092	2037	2089	2082
57.5°	1840	1848	1846	1818	1823	1874	1848	1907	1875	1902	1879
60°	1693	1679	1694	1679	1655	1734	1695	1710	1726	1735	1706
62.5°	1445	1460	1494	1491	1505	1467	1515	1507	1527	1538	1530
65°	1249	1272	1257	1256	1312	1272	1313	1279	1308	1311	1313
67.5°	1038	1050	1041	1042	1051	1092	1045	1089	1079	1104	1079
70°	856	860	864	851	845	838	856	879	886	893	897
72.5°	626	624	627	650	633	631	656	683	677	700	675
75°	420	425	418	426	429	430	439	452	441	470	455
77.5°	269	273	267	269	269	276	273	286	299	299	290
80°	163	161	163	161	161	167	167	172	174	178	175
82.5°	85	86	85	86	87	90	93	93	93	98	92
85°	13	15	16	17	17	18	18	19	20	19	21
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



REPORT NUMBER: P407851
 CATALOG NUMBER: ALS10A40

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	177°	180°
0°	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912	3912
2.5°	3905	3928	3908	3893	3877	3919	3921	3913	3872	3907	3933
5°	3902	3922	3901	3886	3871	3908	3908	3898	3857	3895	3918
7.5°	3871	3892	3873	3867	3849	3886	3885	3870	3833	3874	3896
10°	3824	3837	3821	3819	3809	3841	3849	3828	3791	3835	3854
12.5°	3758	3774	3758	3761	3747	3784	3790	3772	3737	3781	3795
15°	3696	3706	3692	3695	3682	3710	3722	3705	3670	3717	3731
17.5°	3627	3638	3624	3625	3610	3640	3652	3629	3600	3648	3657
20°	3562	3573	3563	3563	3546	3578	3591	3560	3531	3580	3577
22.5°	3508	3519	3508	3506	3487	3515	3534	3499	3467	3515	3519
25°	3450	3463	3458	3457	3428	3449	3479	3446	3416	3463	3468
27.5°	3393	3406	3394	3398	3363	3378	3415	3388	3361	3410	3412
30°	3316	3329	3316	3314	3284	3295	3338	3317	3283	3334	3328
32.5°	3219	3242	3220	3216	3189	3188	3238	3223	3204	3250	3249
35°	3123	3138	3108	3106	3091	3093	3095	3114	3123	3168	3165
37.5°	3035	3007	2976	2998	3002	2977	2969	2979	3005	3051	3051
40°	2913	2861	2852	2898	2895	2885	2849	2825	2837	2886	2879
42.5°	2728	2692	2740	2822	2802	2774	2724	2690	2660	2703	2684
45°	2570	2567	2581	2686	2681	2601	2591	2573	2528	2562	2563
47.5°	2462	2457	2426	2481	2474	2414	2454	2458	2448	2473	2469
50°	2388	2351	2314	2326	2285	2288	2343	2309	2344	2377	2371
52.5°	2255	2208	2230	2201	2130	2210	2239	2129	2193	2235	2243
55°	2090	2052	2127	2075	2011	2071	2093	1985	2000	2030	2041
57.5°	1896	1891	1937	1907	1902	1846	1885	1859	1853	1872	1868
60°	1730	1732	1715	1751	1768	1686	1727	1719	1719	1742	1741
62.5°	1526	1538	1522	1547	1536	1500	1538	1520	1498	1526	1520
65°	1314	1329	1292	1367	1316	1326	1278	1278	1285	1304	1297
67.5°	1093	1077	1098	1112	1131	1105	1077	1073	1090	1101	1103
70°	905	907	901	891	912	885	901	890	876	874	876
72.5°	693	700	705	692	680	693	699	707	685	683	706
75°	465	461	486	476	479	468	483	469	477	486	499
77.5°	309	298	309	298	317	296	314	308	318	317	322
80°	184	186	182	187	183	183	183	189	192	190	199
82.5°	95	95	101	97	101	97	99	101	97	94	103
85°	19	20	20	23	23	23	22	24	23	25	22
87.5°	1	1	1	1	1	1	1	1	1	1	1
90°	0	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)