

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P149520

Luminaire Tested: **TLM-E03-LED-E1-SL2-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P149520  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33726)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TLM-E03-LED-E1-SL2-HSS  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND  
HOUSE SIDE SHIELD  
Light Source: (63) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

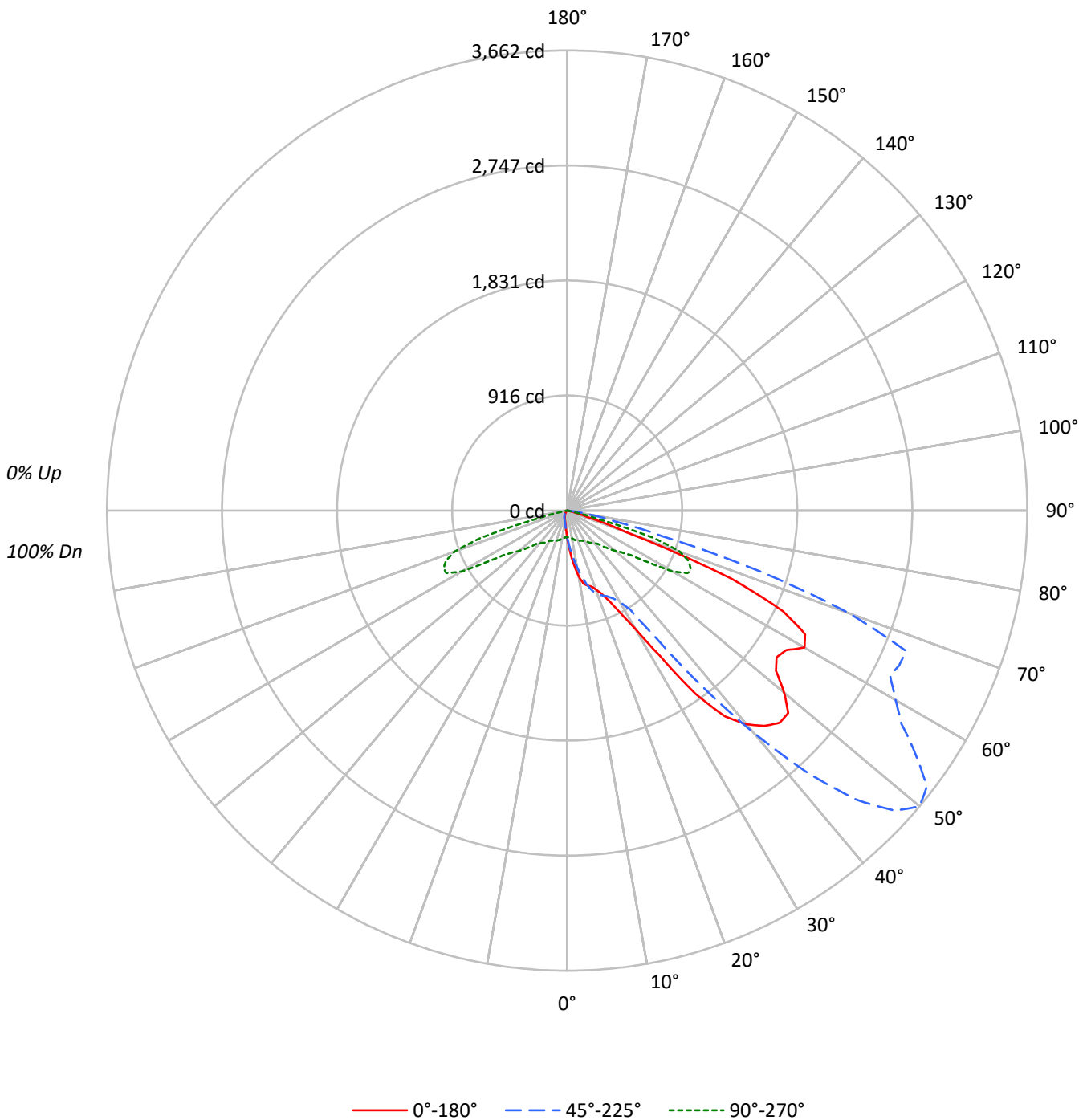
Lumens per Lamp: N/A  
Luminaire Lumens: 5500.7 lumens  
Efficiency: N/A  
Efficacy: 73.1 lumens/watt  
Spacing Criteria (0/90/45): 3.84 / 3.85 / 3.8  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 75.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	106	100	94	89	103	97	92	88	93	89	85	89	86	82	85	82	80	78
2	93	82	73	66	90	80	72	65	76	69	63	73	67	62	70	65	60	58
3	82	68	58	49	79	66	57	49	63	55	48	60	53	47	57	51	46	43
4	72	57	46	38	70	56	45	37	53	44	37	50	42	36	48	41	35	33
5	65	49	38	29	62	47	37	29	45	36	29	43	35	28	41	34	28	25
6	58	42	31	23	56	41	31	23	39	30	23	37	29	23	35	28	22	20
7	53	37	26	19	51	36	26	19	34	25	19	33	24	18	31	24	18	16
8	49	33	23	16	47	32	22	16	30	22	15	29	21	15	28	20	15	13
9	45	29	20	13	43	29	19	13	27	19	13	26	18	13	25	18	13	11
10	42	26	17	11	40	26	17	11	25	17	11	24	16	11	23	16	11	9

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	4542	4542	4542
5°	7823	4646	2658
10°	11629	4918	1946
15°	13751	5438	1605
20°	15235	5865	1329
25°	18860	6247	1021
30°	26921	6861	795
35°	46753	8200	578
40°	62388	9442	309
45°	72733	12208	91
50°	75490	16645	33
55°	76379	23158	0
60°	93861	41678	0
65°	96632	55218	0
70°	31597	59922	0
75°	5407	19796	0
80°	1364	2727	0
85°	0	1482	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.3	0.4
10°-20°	90.4	1.6
20°-30°	183.7	3.3
30°-40°	448.8	8.2
40°-50°	1003.8	18.2
50°-60°	1411.4	25.7
60°-70°	1659.7	30.2
70°-80°	599.3	10.9
80°-90°	80.1	1.5
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°-30°	297.5	5.4
0°-40°	746.3	13.6
0°-60°	3161.5	57.5
0°-90°	5500.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5500.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	211	211	211	211	211	
5°	362	319	215	138	123	40
15°	617	611	244	79	72	175
25°	794	752	263	53	43	387
35°	1779	1237	312	31	22	1092
45°	2389	3254	401	12	3	1808
55°	2035	3387	617	1	0	1886
65°	1897	2916	1084	0	0	1675
75°	65	774	238	0	0	135
85°	0	12	6	0	0	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	211	211	211	211	211	211	211	211	211	211	211
2.5°	276	279	277	272	266	258	251	251	250	247	248
5°	362	363	359	347	336	319	300	298	296	293	292
7.5°	446	450	446	433	411	385	355	352	346	346	342
10°	532	532	528	513	493	456	418	413	406	404	398
12.5°	593	593	591	583	567	534	488	483	474	471	464
15°	617	617	618	625	626	611	563	559	550	542	539
17.5°	632	631	631	641	659	669	638	634	624	620	610
20°	665	663	657	657	674	709	709	708	697	694	689
22.5°	714	712	694	679	687	731	772	770	766	762	759
25°	794	787	756	712	705	752	820	825	828	828	830
27.5°	915	906	851	769	738	786	873	883	892	894	903
30°	1083	1067	988	868	797	836	951	962	975	979	993
32.5°	1359	1350	1274	1094	942	934	1060	1074	1091	1098	1115
35°	1779	1781	1719	1557	1347	1237	1255	1267	1273	1294	1303
37.5°	2064	2069	2083	2019	1869	1757	1616	1629	1598	1601	1602
40°	2220	2236	2318	2380	2368	2303	2190	2197	2139	2126	2063
42.5°	2324	2345	2476	2668	2766	2825	2799	2796	2751	2734	2681
45°	2389	2408	2573	2856	3082	3254	3325	3333	3295	3278	3234
47.5°	2386	2408	2585	2926	3259	3534	3734	3744	3767	3752	3755
50°	2254	2275	2453	2807	3207	3662	4028	4060	4097	4122	4134
52.5°	2094	2109	2267	2603	2985	3609	4202	4257	4312	4359	4392
55°	2035	2052	2176	2455	2807	3387	4283	4364	4442	4519	4582
57.5°	2066	2082	2171	2385	2701	3153	4306	4432	4560	4685	4809
60°	2180	2197	2273	2450	2673	3018	4216	4425	4638	4856	5061
62.5°	2135	2142	2254	2564	2873	2903	3889	4181	4506	4842	5173
63°	2092	2100	2214	2533	2934	2886	3788	4096	4439	4801	5161
65°	1897	1898	1985	2237	2866	2916	3338	3632	4026	4460	4915
67.5°	1416	1409	1493	1685	2250	2917	2865	3030	3304	3689	4097
70°	502	491	627	893	1402	2386	2462	2473	2549	2757	3013
72.5°	163	166	200	327	646	1606	2229	2195	2175	2174	2208
75°	65	66	80	145	290	774	1952	1971	1978	1988	1999
77.5°	31	34	45	81	144	383	1397	1558	1650	1721	1764
80°	11	13	25	50	67	176	736	888	1023	1197	1347
82.5°	0	0	5	35	37	71	302	354	405	525	674
85°	0	0	0	10	11	12	102	123	138	161	186
87.5°	0	0	0	0	0	0	1	3	6	15	23
90°	0	0	0	0	0	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	211	211	211	211	211	211	211	211	211	211	211
2.5°	246	245	245	243	242	240	239	236	235	235	235
5°	291	287	285	280	277	276	271	269	266	267	262
7.5°	341	334	331	324	322	315	313	308	305	299	297
10°	396	387	382	371	368	363	357	351	346	340	337
12.5°	459	451	447	432	425	418	410	402	394	389	382
15°	533	520	516	502	490	481	470	460	454	444	437
17.5°	606	593	590	569	556	550	538	525	514	504	493
20°	679	670	662	642	628	618	602	589	580	566	552
22.5°	752	743	737	716	703	689	675	661	648	631	615
25°	827	821	818	799	787	774	760	744	728	709	692
27.5°	905	907	901	897	884	875	853	842	830	807	786
30°	1004	1010	1008	1011	1003	997	980	966	952	930	906
32.5°	1129	1137	1141	1152	1148	1146	1141	1121	1111	1073	1063
35°	1322	1318	1335	1344	1340	1338	1332	1321	1309	1282	1257
37.5°	1573	1577	1583	1565	1553	1552	1534	1523	1506	1476	1446
40°	2033	2008	1980	1904	1871	1852	1799	1784	1755	1714	1683
42.5°	2631	2606	2522	2395	2327	2233	2190	2137	2096	2029	1993
45°	3225	3153	3143	2995	2911	2787	2710	2621	2528	2440	2376
47.5°	3726	3710	3661	3571	3493	3389	3290	3153	3057	2932	2817
50°	4127	4126	4108	4056	3991	3907	3820	3704	3595	3442	3319
52.5°	4427	4443	4449	4433	4408	4334	4290	4193	4101	3971	3838
55°	4647	4706	4736	4770	4763	4737	4735	4672	4630	4527	4433
57.5°	4919	5016	5109	5274	5280	5338	5368	5398	5406	5365	5334
60°	5265	5463	5639	5984	6074	6216	6308	6408	6493	6500	6498
62.5°	5509	5814	6098	6610	6785	6949	7072	7169	7228	7288	7316
63°	5516	5850	6152	6680	6864	7020	7137	7227	7289	7325	7343
65°	5347	5752	6112	6638	6811	6968	7029	7088	7118	7132	7079
67.5°	4532	4928	5348	5936	6084	6272	6322	6352	6366	6363	6318
70°	3389	3721	4188	4860	5056	5240	5354	5403	5419	5414	5347
72.5°	2366	2561	2946	3694	3961	4197	4338	4411	4426	4396	4334
75°	1987	1997	2084	2493	2743	2995	3154	3200	3170	3079	2921
77.5°	1774	1796	1796	1857	1906	1976	1991	1879	1749	1581	1445
80°	1488	1565	1619	1664	1669	1655	1618	1555	1455	1327	1185
82.5°	904	1056	1118	1350	1464	1541	1535	1451	1375	1242	1121
85°	228	246	267	347	389	475	529	554	563	517	468
87.5°	22	15	25	19	27	20	27	25	31	33	36
90°	0	0	0	0	0	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	211	211	211	211	211	211	211	211	211	211	211
2.5°	233	232	231	230	229	228	226	226	224	223	222
5°	259	257	256	254	251	249	246	242	239	238	236
7.5°	292	287	285	282	278	272	268	265	260	257	251
10°	329	324	318	312	306	299	294	290	282	278	271
12.5°	376	367	360	352	344	336	330	318	311	302	296
15°	424	416	408	398	386	373	367	356	347	333	325
17.5°	482	467	455	443	432	420	408	391	378	366	350
20°	539	521	508	492	476	457	443	431	413	397	380
22.5°	600	582	561	545	523	508	489	469	451	430	409
25°	674	655	631	610	585	564	541	518	496	472	445
27.5°	765	745	719	694	661	635	613	582	554	524	493
30°	880	858	826	790	757	728	697	656	625	589	549
32.5°	1030	1004	961	927	886	848	805	764	720	673	627
35°	1219	1195	1145	1095	1050	1005	951	904	842	785	726
37.5°	1415	1372	1326	1272	1216	1162	1096	1031	960	898	824
40°	1639	1587	1549	1491	1412	1335	1274	1193	1104	1021	934
42.5°	1946	1888	1820	1732	1675	1585	1506	1410	1293	1200	1095
45°	2301	2222	2156	2071	2002	1890	1798	1670	1553	1431	1303
47.5°	2706	2608	2512	2428	2318	2208	2091	1955	1805	1671	1519
50°	3171	3032	2899	2791	2640	2513	2386	2233	2067	1913	1740
52.5°	3688	3527	3351	3185	3010	2847	2694	2518	2333	2145	1952
55°	4312	4191	3984	3773	3539	3321	3124	2906	2681	2434	2231
57.5°	5289	5230	5057	4846	4541	4276	3942	3675	3349	3009	2747
60°	6613	6540	6443	6272	6030	5670	5302	4887	4391	3920	3473
62.5°	7319	7293	7214	7096	6870	6586	6215	5759	5199	4627	4057
63°	7340	7307	7239	7119	6920	6645	6281	5838	5290	4707	4125
65°	7056	7043	6974	6843	6707	6497	6215	5834	5374	4823	4244
67.5°	6258	6219	6113	6073	5978	5832	5617	5355	5026	4593	4093
70°	5293	5235	5102	5031	4915	4823	4692	4505	4302	4000	3627
72.5°	4270	4150	4028	3843	3681	3517	3372	3240	3017	2895	2612
75°	2773	2555	2346	2066	1814	1591	1374	1264	1035	942	809
77.5°	1316	1194	1030	903	741	605	494	371	291	228	174
80°	1062	959	860	745	623	497	381	285	202	140	99
82.5°	947	835	713	634	551	451	370	302	223	163	111
85°	368	310	239	195	152	125	113	78	61	48	37
87.5°	32	26	21	14	15	8	9	6	5	5	4
90°	0	0	0	0	0	0	0	0	0	0	0





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**CANDELA DISTRIBUTION (continued):**

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	211	211	211	211	211	211	211	211	211	211	211
2.5°	221	220	219	217	217	215	214	213	208	197	188
5°	232	230	228	225	223	220	218	215	204	183	165
7.5°	248	244	241	235	232	228	225	220	202	170	145
10°	267	260	255	248	242	237	232	225	200	156	127
12.5°	290	282	272	264	256	249	242	233	197	144	113
15°	313	301	294	283	272	262	252	244	198	131	101
17.5°	339	327	312	300	288	275	263	247	193	121	92
20°	364	347	333	318	301	285	270	256	189	111	84
22.5°	391	371	353	334	313	295	277	259	182	102	77
25°	424	401	375	352	330	308	285	263	175	94	72
27.5°	464	434	408	379	348	320	295	271	168	88	67
30°	515	480	443	406	373	341	306	276	161	82	62
32.5°	583	539	494	451	407	366	329	290	157	77	57
35°	673	616	561	507	454	404	356	312	157	71	51
37.5°	758	692	622	555	492	434	377	324	149	66	46
40°	850	771	689	610	534	462	397	336	142	60	41
42.5°	991	891	784	692	601	512	431	359	133	54	36
45°	1176	1049	923	811	695	586	490	401	131	49	31
47.5°	1374	1224	1076	933	797	670	555	448	131	44	27
50°	1571	1383	1225	1059	906	756	619	497	132	40	22
52.5°	1749	1548	1371	1179	1010	836	687	545	130	35	18
55°	1996	1760	1555	1343	1145	949	780	617	131	31	15
57.5°	2451	2174	1927	1649	1421	1168	963	765	143	26	11
60°	3104	2744	2397	2058	1768	1467	1201	968	168	21	8
62.5°	3543	3072	2658	2284	1947	1632	1342	1077	185	17	5
63°	3588	3101	2685	2299	1955	1640	1348	1085	186	16	5
65°	3673	3151	2700	2302	1947	1629	1344	1084	188	13	4
67.5°	3576	3074	2613	2216	1877	1564	1294	1044	187	9	3
70°	3198	2782	2377	2007	1699	1416	1178	952	172	6	2
72.5°	2348	2065	1751	1484	1280	1063	907	715	133	4	1
75°	696	634	533	470	415	343	305	238	68	2	0
77.5°	139	126	113	103	97	83	79	65	28	1	0
80°	73	60	51	45	39	32	27	22	5	0	0
82.5°	70	47	34	28	24	19	15	11	3	0	0
85°	26	20	15	12	10	9	7	6	0	0	0
87.5°	4	3	3	2	2	1	1	1	0	0	0
90°	0	0	0	0	0	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	125°	135°	145°	155°	165°	175°	180°
0°	211	211	211	211	211	211	211
2.5°	179	171	167	162	162	161	163
5°	149	138	130	124	125	122	123
7.5°	126	115	108	104	103	102	102
10°	109	99	93	90	89	89	89
12.5°	97	87	82	80	80	79	79
15°	87	79	74	72	72	71	72
17.5°	79	71	67	65	65	64	64
20°	72	65	61	58	58	57	58
22.5°	66	59	54	52	51	50	51
25°	60	53	48	45	44	44	43
27.5°	55	48	42	39	38	38	37
30°	50	42	36	33	32	32	32
32.5°	45	36	31	28	27	27	27
35°	40	31	26	23	22	22	22
37.5°	34	26	20	18	17	16	16
40°	29	20	15	13	11	11	11
42.5°	24	16	11	8	7	6	7
45°	20	12	7	4	3	3	3
47.5°	16	8	3	1	1	1	1
50°	12	5	1	0	0	1	1
52.5°	9	3	0	0	0	0	0
55°	5	1	0	0	0	0	0
57.5°	3	0	0	0	0	0	0
60°	2	0	0	0	0	0	0
62.5°	1	0	0	0	0	0	0
63°	1	0	0	0	0	0	0
65°	1	0	0	0	0	0	0
67.5°	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0

(END OF REPORT)