

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: 767384_150MP

Luminaire Tested: **MPRC-FL-3-150**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 767384_150MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: MPRC-FL-3-150
Description: 150W MP TYPE III ROADWAY
Light Source: 150 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 14000 (1 lamp)
Luminaire Lumens: 10369.6 lumens
Efficiency: 74.1%
Efficacy: 56.1 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Medium - Full Cutoff
BUG Rating: B2 - U0 - G2

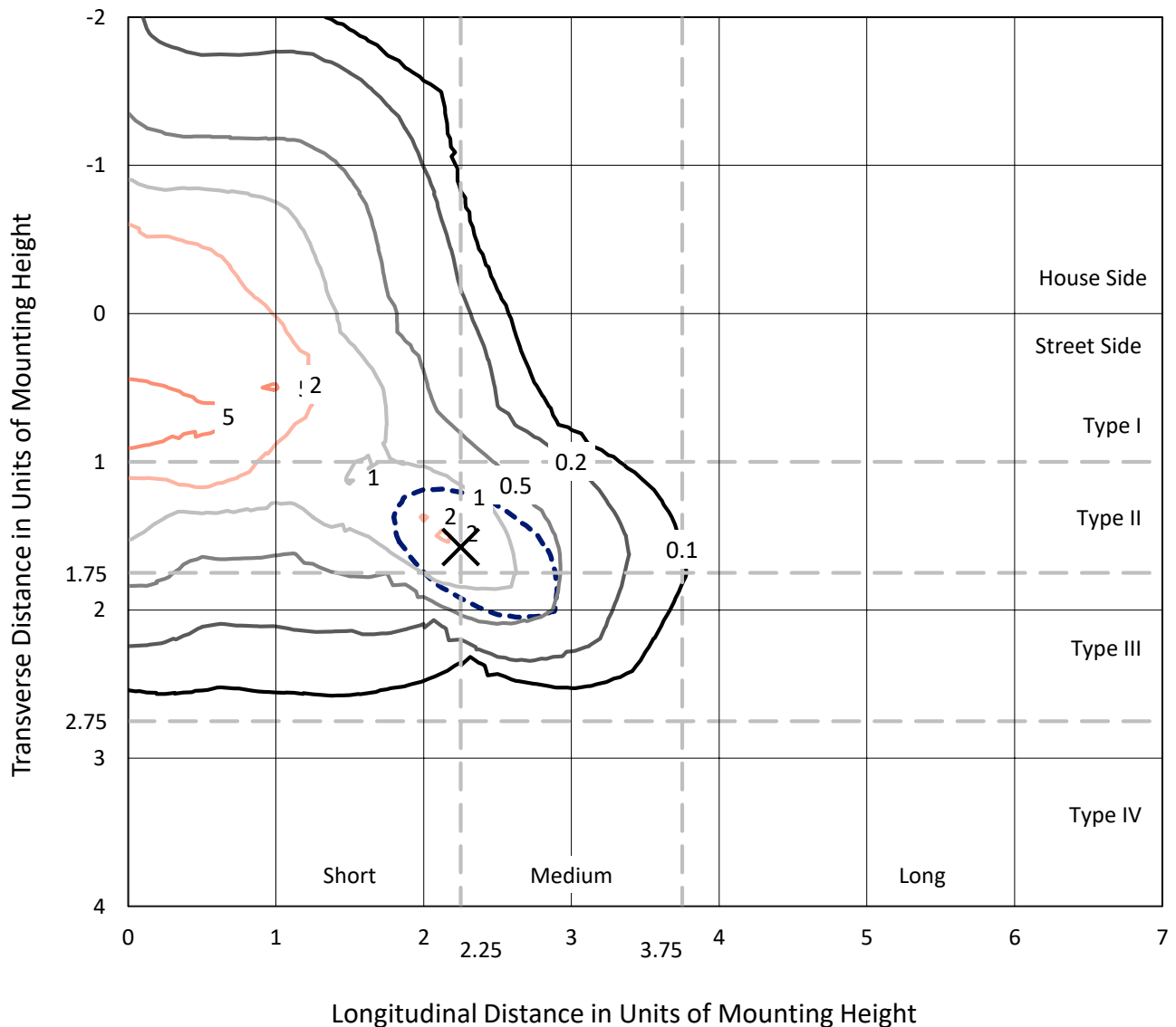
Input Watts (W): 185
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

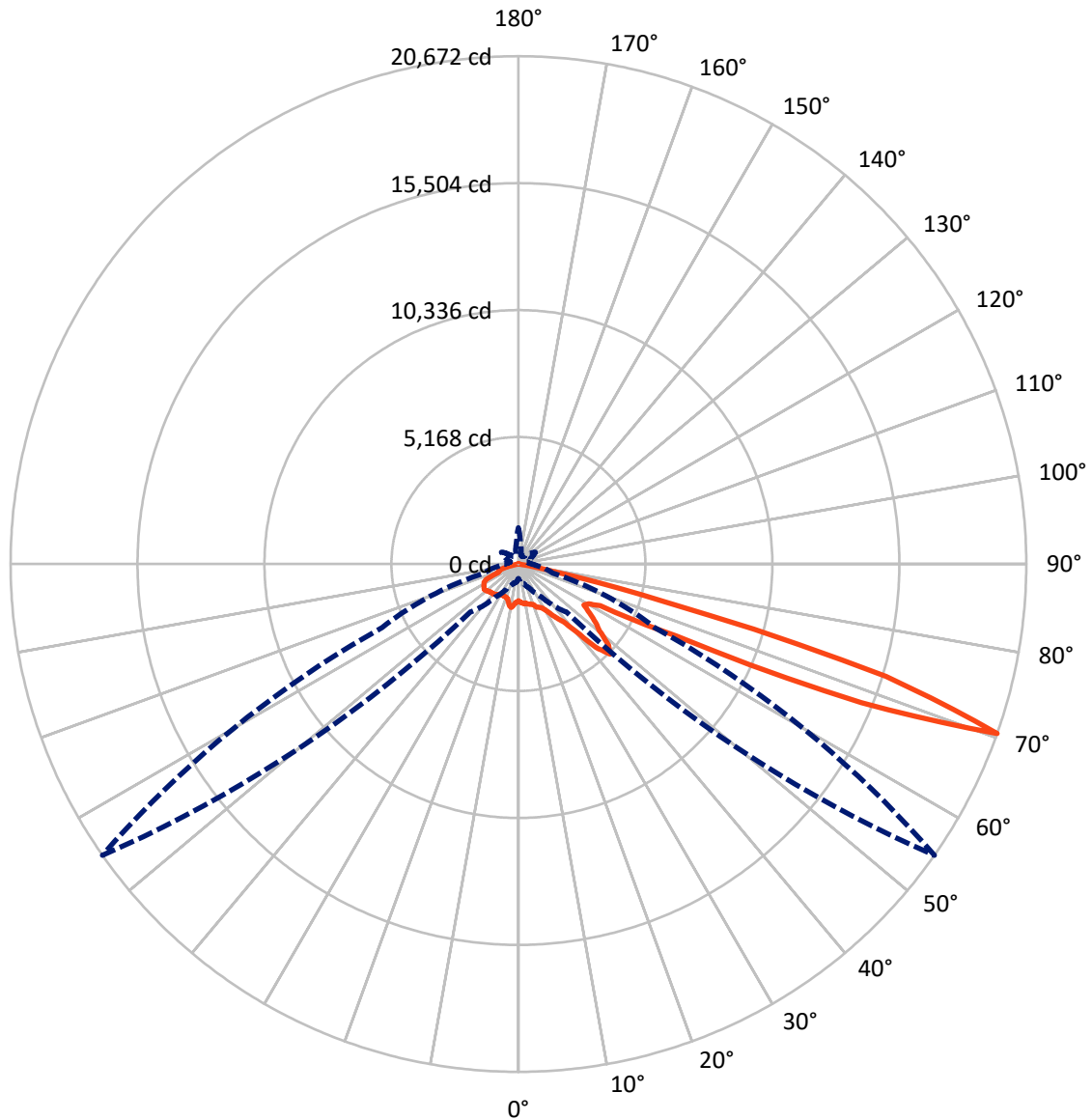
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.9 fc
 Type III - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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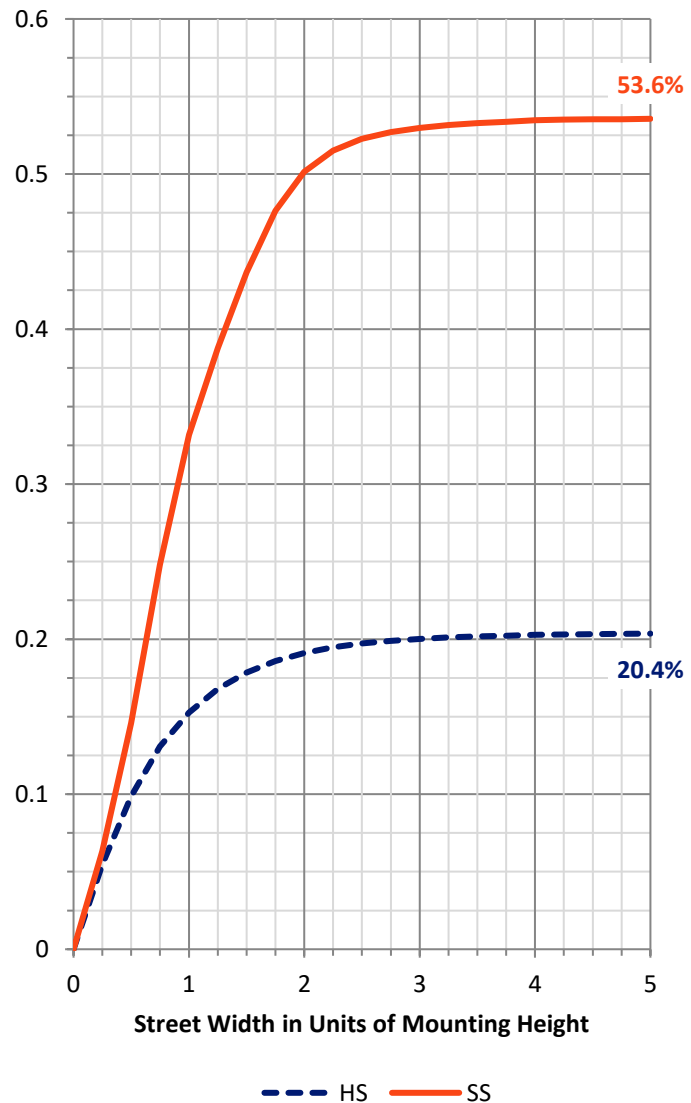
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2856.2	0.0	2856.2
	% Lamp	20.4	0.0	20.4
Street Side	Lumens	7513.3	0.0	7513.3
	% Lamp	53.7	0.0	53.7
Total	Lumens	10369.6	0.0	10369.6
	% Lamp	74.1	0.0	74.1

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	151.9	1.5	1.1
10°-20°	473.2	4.6	3.4
20°-30°	839.3	8.1	6.0
30°-40°	1515.3	14.6	10.8
40°-50°	2200.1	21.2	15.7
50°-60°	1946.6	18.8	13.9
60°-70°	2067.1	19.9	14.8
70°-80°	1151.6	11.1	8.2
80°-90°	24.5	0.2	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°	10369.6	100.0	74.1
0°-180°	10369.6	100.0	74.1

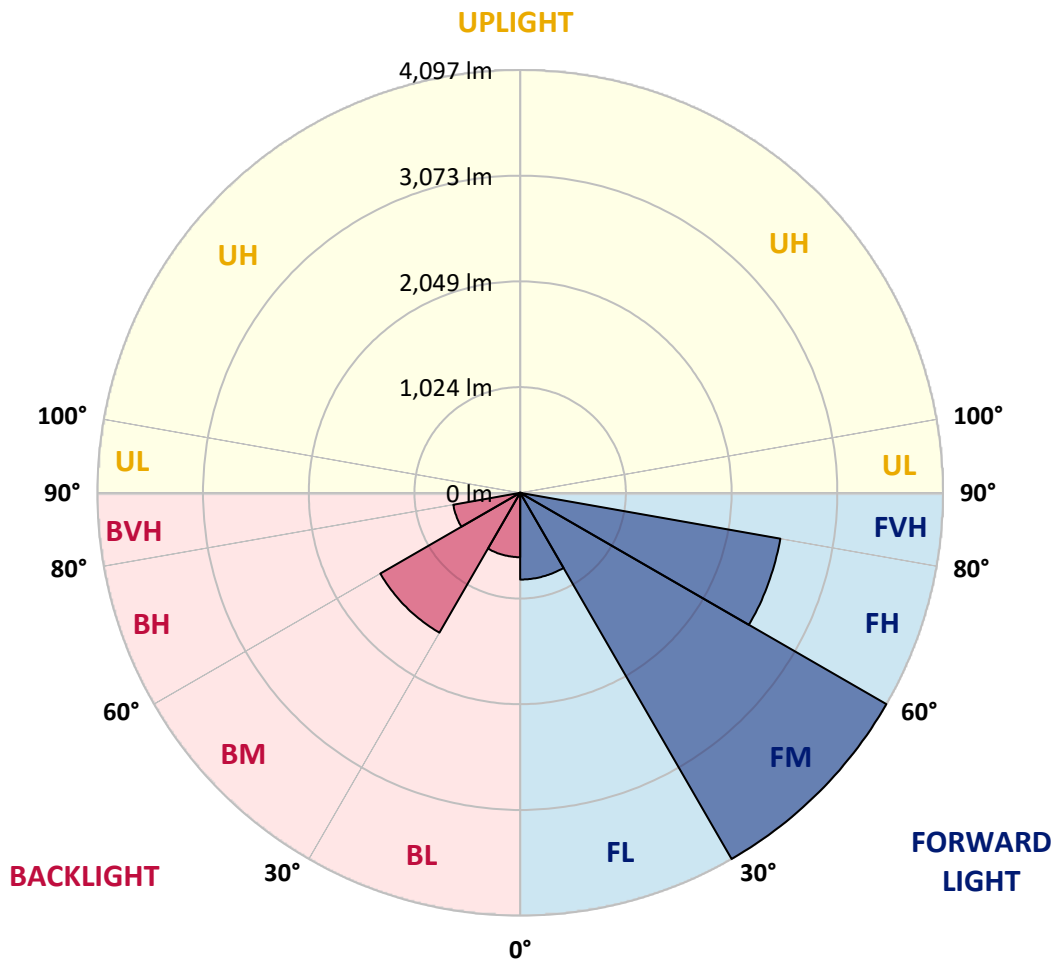


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	840.5	6.0			
FM	(30°-60°)	4097.5	29.3			
FH	(60°-80°)	2560.3	18.3			G2/5000
FVH	(80°-90°)	15.1	0.1			G1/100
BL	(0°-30°)	623.9	4.5	B2/1000		
BM	(30°-60°)	1564.5	11.2	B2/2500		
BH	(60°-80°)	658.4	4.7	B2/1000		G2/1000
BVH	(80°-90°)	9.4	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		3630.4	25.9			

BUG Rating: B2-U0-G2
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1489	1489	1489	1489	1489	1489	1489	1489	1489	1489	1489
2.5°	1573	1561	1561	1561	1453	1555	1567	1561	1561	1369	1417
5°	1597	1603	1597	1609	1483	1597	1585	1585	1579	1417	1489
7.5°	1633	1663	1663	1675	1531	1663	1639	1633	1627	1507	1687
10°	1729	1723	1735	1729	1597	1723	1609	1693	1699	1555	1711
12.5°	1789	1789	1801	1795	1669	1777	1669	1735	1717	1543	1663
15°	1861	1885	1885	1879	1741	1825	1699	1789	1723	1525	1615
17.5°	1981	2005	1981	1963	1801	1885	1723	1801	1729	1519	1615
20°	2173	2167	2137	2077	1903	1933	1765	1807	1765	1549	1639
22.5°	2425	2389	2323	2239	2035	1993	1909	1813	1777	1585	1657
25°	2665	2665	2563	2431	2191	2095	1951	1831	1759	1609	1657
27.5°	3217	3199	3031	2731	2395	2257	2017	1855	1741	1615	1663
30°	4202	4172	3860	3301	2767	2437	2173	1909	1753	1609	1669
32.5°	5138	5120	4694	4034	3205	2695	2425	1987	1813	1657	1693
35°	5798	5834	5288	4544	3890	3115	2707	2191	1993	1771	1753
37.5°	6291	6200	5576	4754	4280	3776	2983	2551	2323	1897	1825
40°	5834	5654	5300	4922	4634	4502	3595	3115	2701	2101	1999
42.5°	4706	4538	4574	4862	5330	5132	4634	4016	3079	2323	2155
45°	3613	3481	3745	4946	5996	5546	5240	5918	3217	2425	2203
47.5°	2665	2671	3151	4802	5930	5186	4934	7581	3247	2395	2197
50°	2281	2263	2731	4352	5030	4352	4274	6801	3265	2293	2161
52.5°	2329	2155	2173	3247	3914	3715	3920	4502	3265	2209	2113
55°	2497	2245	1783	2323	3049	3271	3505	3782	3265	2137	2059
57.5°	2425	2215	1609	2011	2683	2935	3145	4064	3337	2059	1975
60°	1993	2047	1471	1915	2497	3541	3283	4256	3367	1879	1861
62.5°	1681	1681	1273	1651	2191	4658	3745	4100	3343	1723	1681
65°	1333	1297	1068	1405	2047	4964	7065	4304	2293	1687	1579
67.5°	960	972	936	1242	1885	4094	15054	5078	2083	1441	1122
70°	588	720	816	1098	1639	2761	20672	6122	1459	738	552
72.5°	420	552	666	948	1303	1819	15654	6140	1230	438	336
75°	288	432	510	774	888	690	6128	4730	1080	258	240
77.5°	36	192	168	258	180	246	1369	2113	822	174	174
80°	48	42	42	60	48	66	216	426	312	48	90
82.5°	24	18	12	18	12	18	60	78	72	0	36
85°	0	6	0	0	6	6	12	18	18	0	12
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°	1489	1489	1489	1489	1489	1489	1489	1489	1489	1489
2.5°	1543	1543	1543	1549	1531	1537	1525	1381	1393	1273
5°	1603	1609	1597	1585	1573	1543	1531	1363	1387	1501
7.5°	1699	1765	1777	1705	1615	1543	1531	1351	1357	1465
10°	1741	1843	1897	1795	1639	1537	1519	1513	1357	1489
12.5°	1687	1789	1843	1735	1561	1501	1489	1537	1381	1513
15°	1609	1651	1675	1609	1507	1471	1471	1537	1435	1549
17.5°	1579	1567	1549	1489	1453	1417	1447	1501	1465	1573
20°	1597	1555	1501	1447	1417	1387	1405	1471	1447	1597
22.5°	1633	1555	1477	1435	1387	1369	1351	1393	1411	1573
25°	1639	1591	1477	1429	1387	1339	1309	1333	1339	1489
27.5°	1627	1603	1489	1423	1381	1297	1267	1152	1255	1405
30°	1633	1597	1489	1435	1369	1279	1236	1116	1164	1321
32.5°	1657	1597	1501	1453	1357	1273	1194	1068	1086	1224
35°	1693	1615	1531	1501	1375	1255	1152	1026	1056	1140
37.5°	1741	1639	1585	1549	1399	1218	1122	966	1002	1068
40°	1843	1693	1633	1585	1405	1200	1074	918	942	1020
42.5°	1963	1747	1651	1597	1399	1182	1026	870	894	960
45°	2035	1813	1675	1609	1393	1152	990	846	918	912
47.5°	2029	1849	1717	1639	1393	1128	954	810	894	888
50°	2017	1855	1783	1681	1393	1116	924	798	894	912
52.5°	1975	1831	1807	1729	1393	1080	900	774	792	960
55°	1867	1789	1771	1717	1393	1062	858	768	774	948
57.5°	1771	1723	1747	1675	1417	1062	852	756	732	900
60°	1645	1639	1705	1627	1429	1086	840	714	720	888
62.5°	1531	1525	1603	1579	1435	1122	810	678	750	960
65°	1417	1345	1387	1447	1333	1062	774	642	852	1176
67.5°	828	606	708	894	810	714	588	546	942	1417
70°	432	342	564	840	546	378	336	378	882	1477
72.5°	276	258	558	810	408	240	210	264	732	1309
75°	192	204	468	594	270	156	144	156	414	792
77.5°	132	150	264	300	150	90	90	66	126	300
80°	72	78	114	114	72	48	54	30	0	108
82.5°	24	36	42	36	30	24	24	18	0	48
85°	6	12	12	6	12	0	12	6	0	12
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)