

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: P143964

Luminaire Tested: **LDRL-5WQ-F05-E-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143964
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33698)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRL-5WQ-F05-E-7030
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (35) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11557.1 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 133.3
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

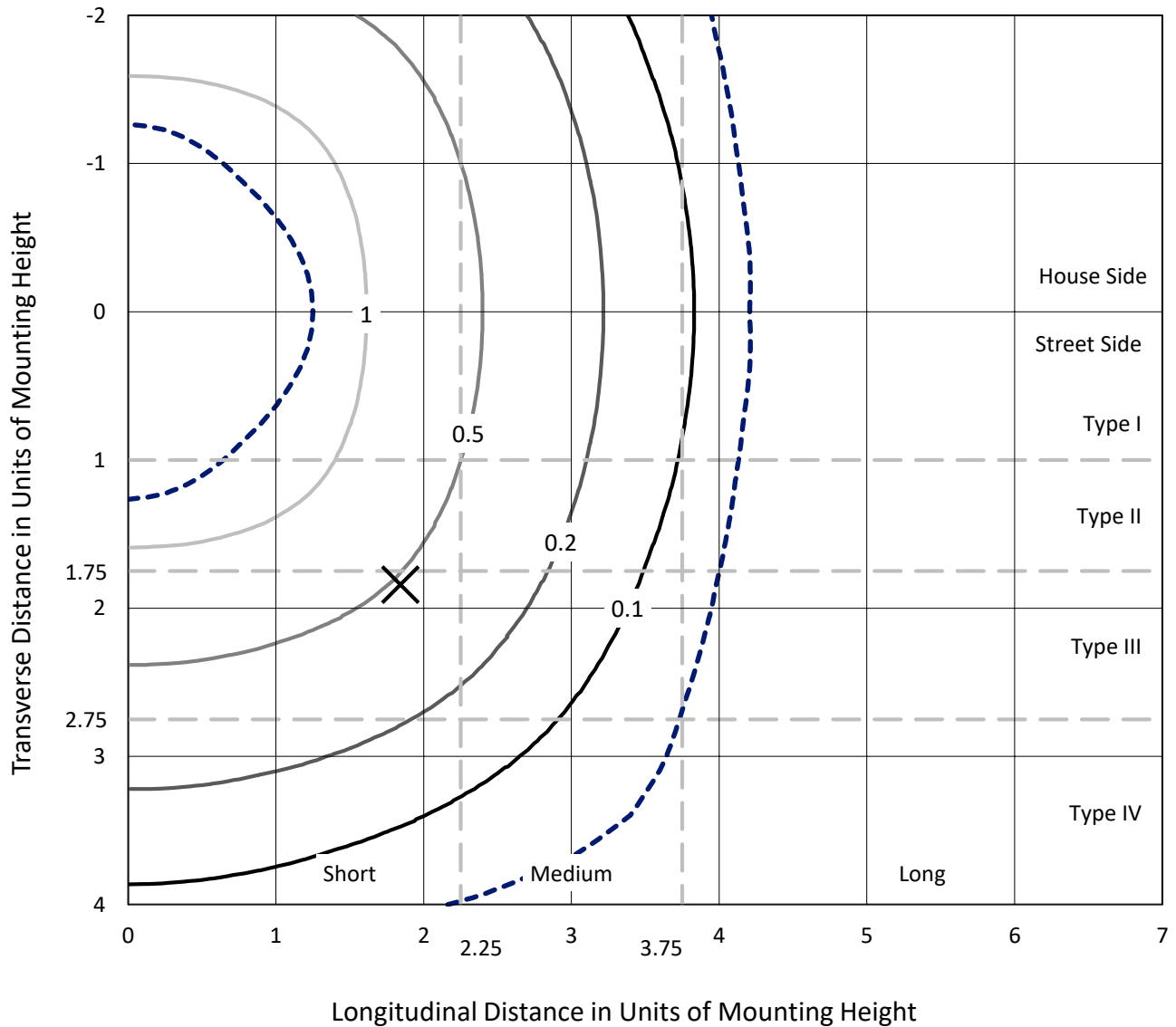


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Iso-Footcandle Lines of Horizontal Illumination

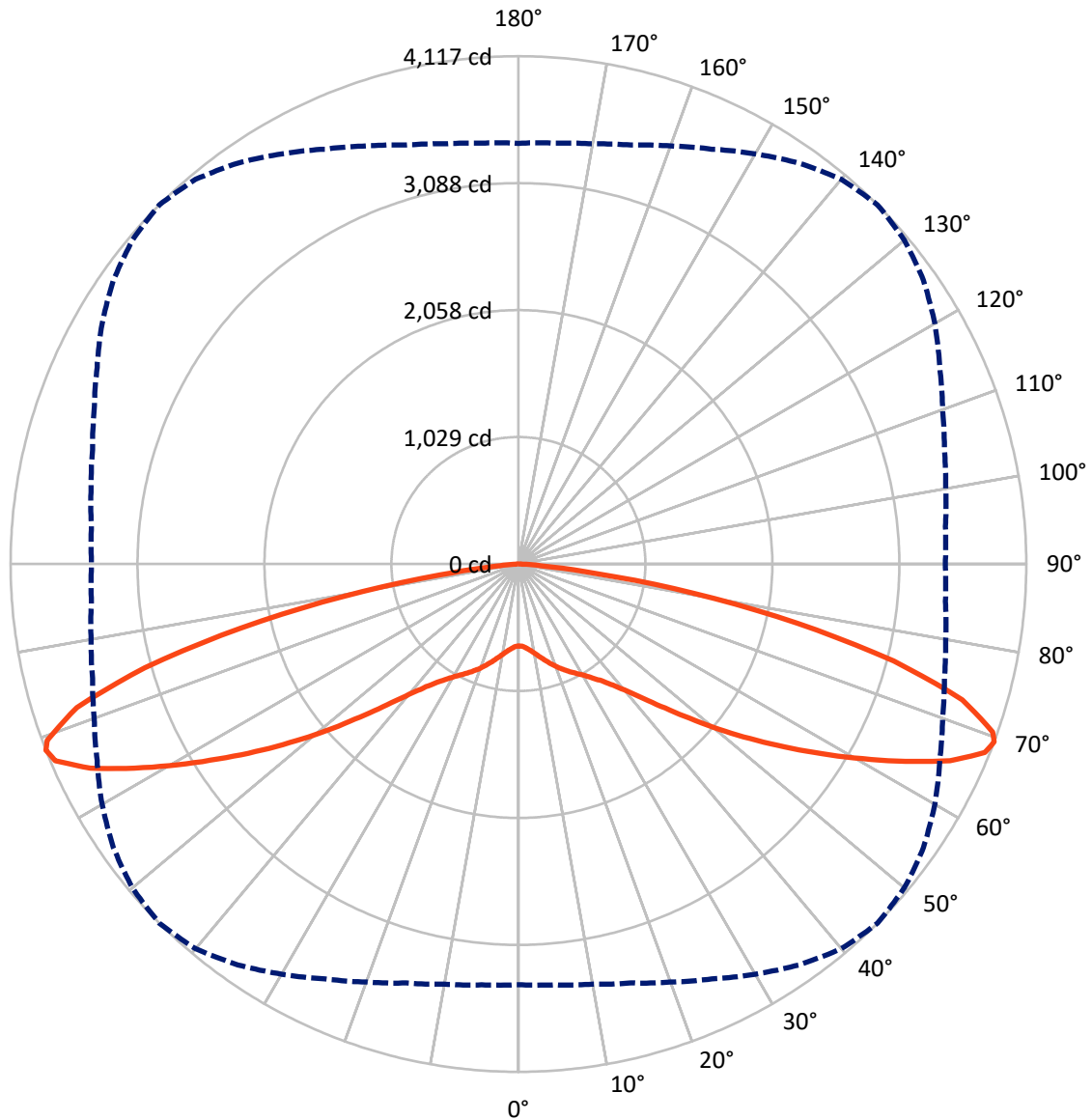
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 1.8 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5778.5	0.0	5778.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5778.5	0.0	5778.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	11557.1	0.0	11557.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	0.6
10°-20°	230.9	2.0
20°-30°	445.2	3.9
30°-40°	729.5	6.3
40°-50°	1268.5	11.0
50°-60°	2253.3	19.5
60°-70°	3498.3	30.3
70°-80°	2787.2	24.1
80°-90°	277.2	2.4
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°	11557.1	100.0
0°-180°	11557.1	100.0



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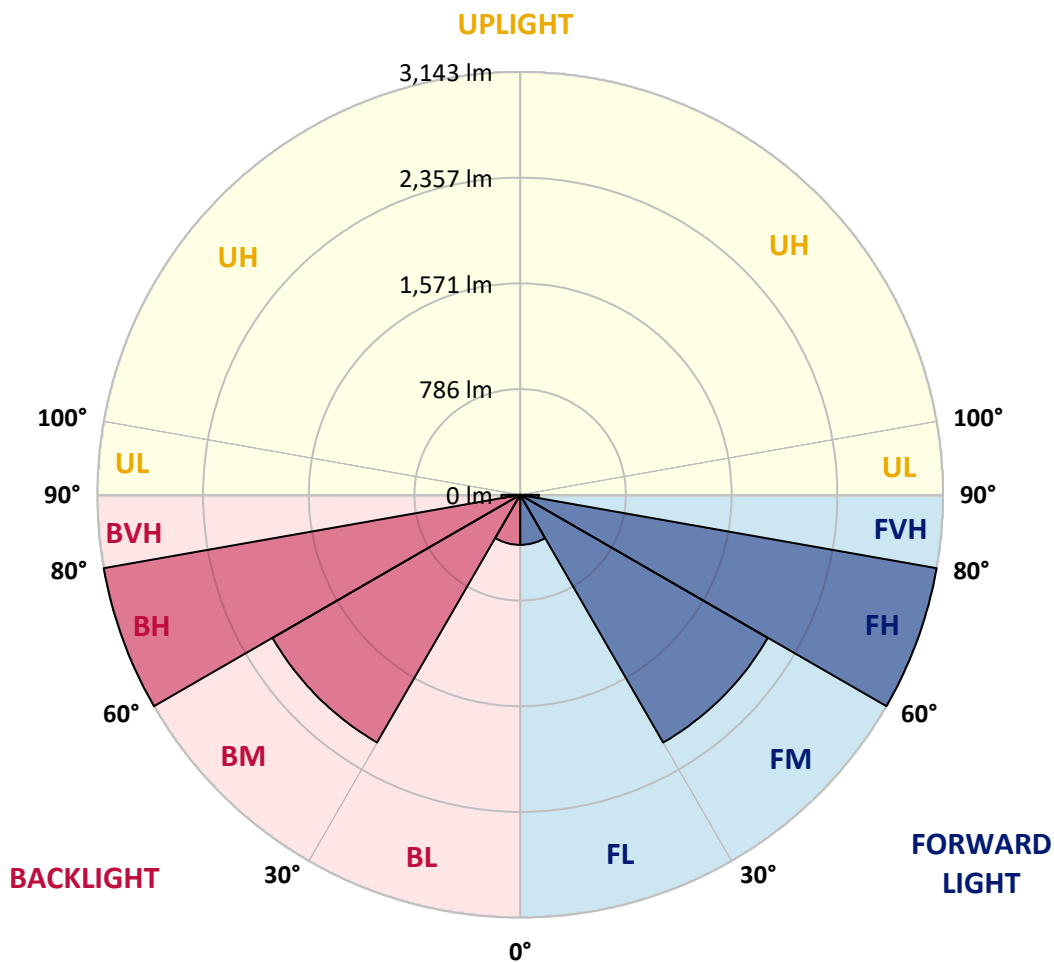
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	371.6	3.2			
FM	(30°-60°)	2125.6	18.4			
FH	(60°-80°)	3142.8	27.2			G2/5000
FVH	(80°-90°)	138.6	1.2			G2/225
BL	(0°-30°)	371.6	3.2	B1/500		
BM	(30°-60°)	2125.6	18.4	B2/2500		
BH	(60°-80°)	3142.8	27.2	B4/5000		G2/5000
BVH	(80°-90°)	138.6	1.2			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	664.3	664.3	664.3	664.3	664.3	664.3	664.3	664.3	664.3	664.3	664.3
2.5°	669.5	669.5	669.5	668.8	668.8	668.0	668.8	668.0	668.0	668.0	668.0
5°	686.9	685.4	685.4	684.6	686.1	686.1	684.6	685.4	684.6	685.4	685.4
7.5°	708.8	708.8	708.8	708.0	709.5	708.8	708.0	708.8	708.8	708.0	708.0
10°	735.9	736.7	735.9	735.9	738.2	737.4	738.2	738.2	738.9	738.2	738.2
12.5°	767.6	767.6	768.3	769.1	769.8	770.6	772.8	772.1	773.6	772.1	772.1
15°	804.5	806.0	804.5	804.5	806.8	808.3	809.0	809.0	810.5	809.8	808.3
17.5°	843.7	844.5	843.7	843.0	845.2	847.5	848.2	848.2	850.5	849.0	849.0
20°	883.7	884.4	882.9	882.2	885.2	885.2	886.7	887.5	889.7	890.5	888.2
22.5°	920.6	921.4	920.6	919.9	922.9	922.9	925.1	925.9	928.9	928.2	928.2
25°	956.8	956.8	956.1	956.1	959.1	959.8	962.1	963.6	966.6	966.6	966.6
27.5°	990.0	990.7	989.2	988.5	994.5	996.8	998.3	1001.3	1003.6	1005.1	1004.3
30°	1027.7	1027.7	1026.9	1029.2	1033.0	1036.0	1039.0	1043.5	1048.1	1046.5	1046.5
32.5°	1072.2	1073.7	1072.9	1075.9	1080.5	1085.0	1088.8	1094.0	1096.3	1100.1	1097.1
35°	1131.7	1134.8	1133.3	1136.3	1140.0	1143.1	1151.3	1156.6	1160.4	1162.7	1161.1
37.5°	1206.4	1204.9	1207.9	1208.7	1216.2	1220.0	1229.8	1237.3	1243.3	1245.6	1244.1
40°	1299.1	1296.9	1300.6	1304.4	1314.2	1318.0	1329.3	1340.6	1348.9	1351.9	1350.4
42.5°	1410.0	1413.0	1419.0	1424.3	1437.9	1448.4	1461.2	1477.8	1486.9	1490.6	1485.4
45°	1555.5	1550.2	1561.5	1575.1	1582.6	1606.0	1627.1	1644.5	1659.5	1665.6	1659.5
47.5°	1721.4	1720.6	1734.2	1750.8	1770.4	1792.2	1817.1	1839.7	1866.1	1867.6	1860.1
50°	1904.6	1919.7	1927.2	1943.8	1980.0	2007.1	2038.8	2072.7	2096.9	2104.4	2090.8
52.5°	2125.5	2136.8	2141.3	2169.2	2202.4	2235.6	2280.1	2320.8	2348.7	2351.7	2344.9
55°	2365.3	2374.3	2382.6	2416.5	2452.7	2482.1	2538.7	2578.7	2606.6	2617.1	2612.6
57.5°	2613.3	2621.6	2632.2	2669.1	2706.1	2747.6	2801.1	2847.8	2880.3	2899.9	2894.6
60°	2888.5	2888.5	2912.7	2949.6	2979.8	3028.8	3084.6	3138.9	3174.3	3205.2	3196.9
62.5°	3178.1	3186.4	3209.8	3239.9	3271.6	3316.8	3380.2	3445.0	3499.3	3522.7	3521.9
65°	3397.5	3412.6	3443.5	3478.2	3531.0	3584.5	3664.4	3745.1	3810.7	3844.6	3844.6
67.5°	3461.6	3471.4	3509.8	3562.6	3638.8	3724.0	3832.5	3944.9	4034.6	4079.1	4051.2
69°	3410.3	3424.6	3458.6	3515.9	3606.4	3710.4	3839.3	3966.8	4070.8	4116.8	4084.4
70°	3350.7	3366.6	3400.5	3457.1	3550.6	3661.4	3790.3	3927.6	4039.1	4078.4	4041.4
72.5°	3108.0	3127.6	3151.7	3200.7	3285.1	3389.2	3505.3	3626.0	3733.0	3763.9	3717.9
75°	2694.0	2697.8	2709.9	2746.0	2776.2	2850.1	2948.9	3044.6	3125.3	3143.4	3094.4
77.5°	1906.8	1886.5	1866.1	1897.0	1921.2	2016.2	2123.2	2201.7	2286.1	2311.7	2262.0
80°	836.2	828.6	857.3	898.0	1004.3	1067.7	1172.5	1284.8	1356.4	1440.1	1350.4
82.5°	165.1	174.2	201.3	248.8	306.9	386.0	454.7	532.3	602.4	634.1	601.7
85°	67.1	73.1	82.9	92.7	99.5	111.6	131.2	162.9	179.5	181.7	172.7
87.5°	27.9	32.4	43.7	52.0	52.8	50.5	52.0	53.5	43.7	35.4	44.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	664.3	664.3	664.3	664.3	664.3	664.3	664.3	664.3
2.5°	668.0	668.8	668.0	668.8	668.0	668.0	668.8	668.0
5°	684.6	685.4	684.6	683.9	683.1	683.9	683.9	683.9
7.5°	708.0	707.2	706.5	706.5	705.7	705.0	706.5	706.5
10°	736.7	735.9	734.4	734.4	733.6	733.6	733.6	733.6
12.5°	771.3	769.1	768.3	766.1	765.3	764.5	764.5	765.3
15°	807.5	805.3	804.5	800.7	800.7	800.0	800.0	800.0
17.5°	846.0	843.7	840.7	840.7	838.4	836.9	837.7	836.2
20°	885.2	882.2	880.7	879.9	876.9	876.9	876.9	876.1
22.5°	923.6	921.4	919.1	916.1	913.1	912.3	912.3	911.6
25°	962.8	959.1	954.6	951.5	948.5	946.3	946.3	946.3
27.5°	1002.1	997.5	990.7	987.0	982.5	980.2	980.2	979.4
30°	1043.5	1038.2	1032.2	1026.9	1020.9	1018.6	1017.9	1016.4
32.5°	1093.3	1088.0	1082.0	1074.4	1068.4	1064.6	1064.6	1062.4
35°	1156.6	1150.6	1146.1	1136.3	1128.7	1122.7	1123.5	1125.0
37.5°	1239.6	1232.0	1228.3	1216.2	1206.4	1200.4	1200.4	1199.6
40°	1345.1	1337.6	1329.3	1318.0	1305.9	1297.6	1295.4	1295.4
42.5°	1479.3	1472.5	1461.2	1445.4	1431.1	1422.0	1414.5	1415.2
45°	1647.5	1639.2	1623.3	1603.7	1586.4	1573.6	1563.0	1563.0
47.5°	1851.8	1834.5	1812.6	1795.3	1765.9	1746.2	1738.7	1737.2
50°	2084.8	2052.4	2025.2	2000.3	1969.4	1949.1	1937.8	1934.7
52.5°	2329.1	2295.2	2261.2	2228.8	2191.1	2170.0	2151.9	2150.4
55°	2594.5	2551.5	2508.5	2476.9	2432.4	2410.5	2392.4	2381.9
57.5°	2865.2	2816.9	2786.0	2740.8	2694.0	2678.2	2660.8	2648.0
60°	3169.8	3117.0	3076.3	3028.8	2998.6	2964.7	2948.1	2938.3
62.5°	3481.2	3432.2	3380.2	3334.9	3292.7	3269.3	3246.7	3235.4
65°	3797.9	3717.2	3655.4	3592.8	3543.0	3500.8	3465.4	3460.8
67.5°	3992.4	3890.6	3787.3	3696.1	3622.9	3563.4	3527.2	3514.4
69°	4008.2	3897.4	3768.5	3659.1	3574.7	3517.4	3474.4	3460.8
70°	3964.5	3852.9	3717.2	3599.6	3512.1	3449.5	3414.1	3391.5
72.5°	3644.8	3546.8	3416.3	3300.2	3221.1	3147.9	3112.5	3103.4
75°	3006.9	2902.9	2783.0	2727.2	2672.2	2626.2	2602.0	2599.8
77.5°	2135.3	2029.0	1937.8	1864.6	1805.1	1775.7	1782.4	1757.6
80°	1222.2	1083.5	973.4	908.6	820.3	767.6	708.0	751.0
82.5°	525.5	424.5	323.5	263.1	200.6	159.1	131.2	122.1
85°	147.0	119.9	100.3	92.0	82.9	73.9	62.6	58.1
87.5°	49.8	47.5	42.2	42.2	38.5	32.4	22.6	20.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)