

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: P143673

Luminaire Tested: **LDRL-5MQ-F06-E-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143673
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33697)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRL-5MQ-F06-E-8030
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (42) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12991.4 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

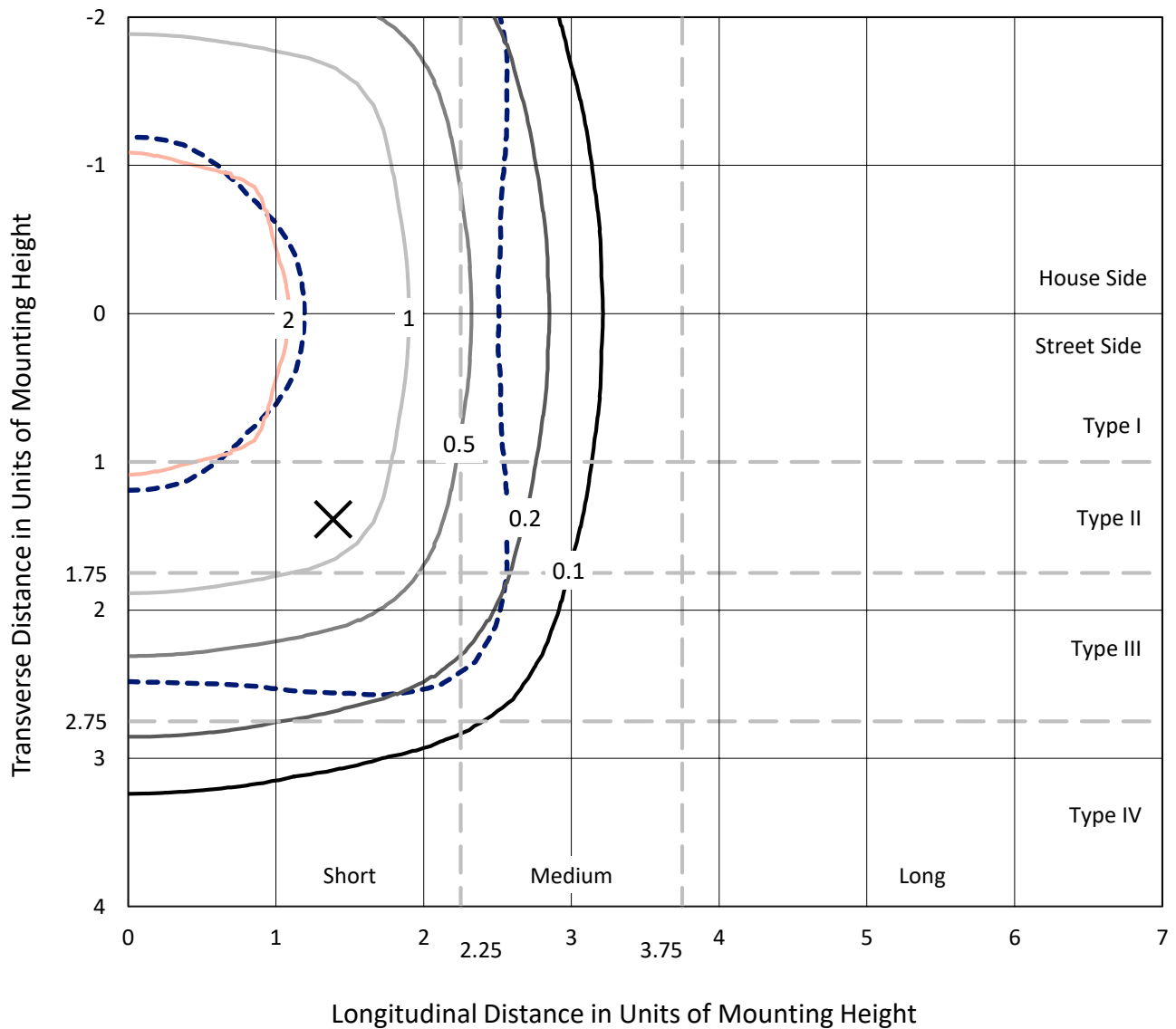
Input Watts (W): 156.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P143673
 CATALOG NUMBER: LDRL-5MQ-F06-E-8030

Iso-Footcandle Lines of Horizontal Illumination

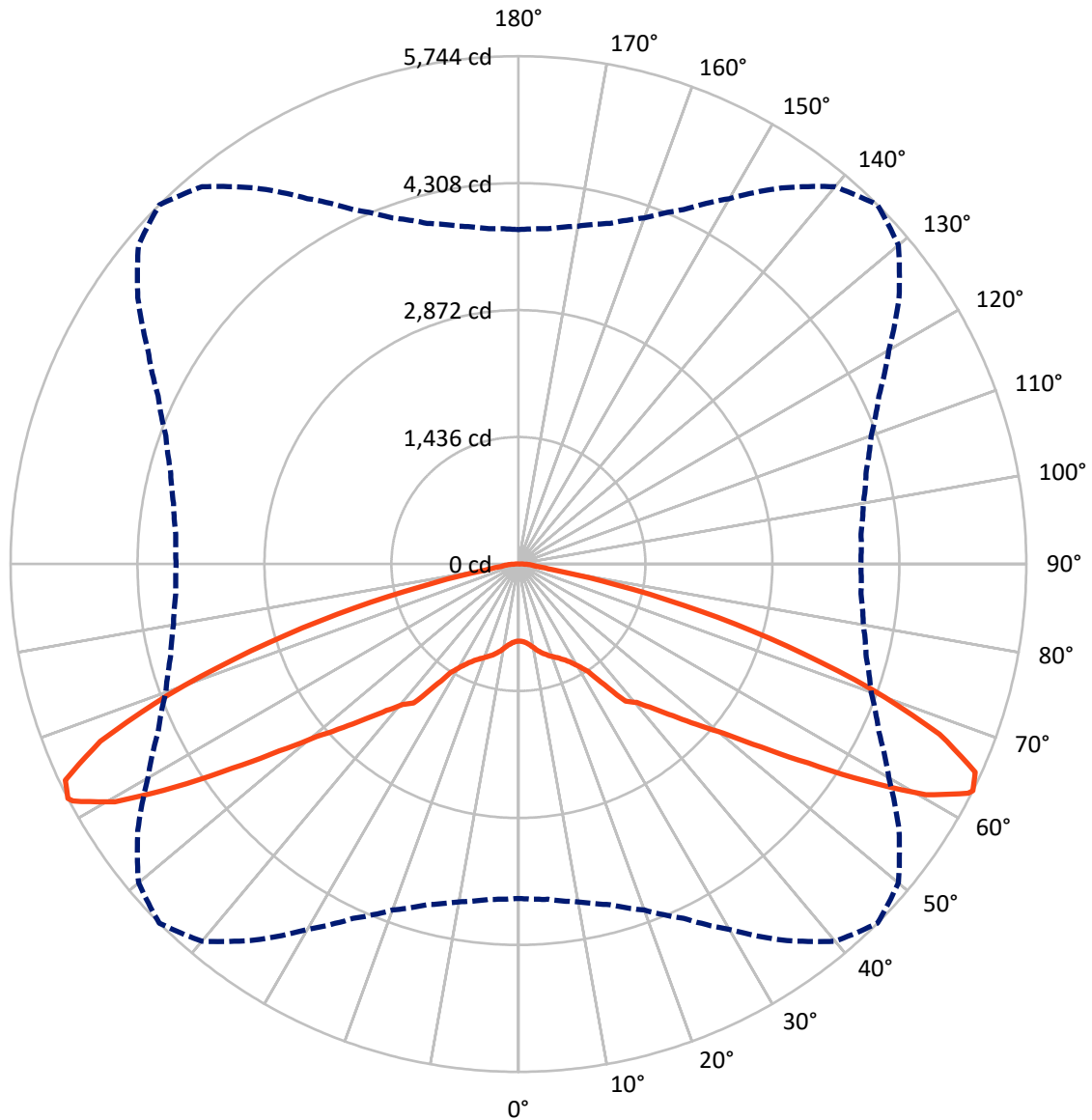
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.4 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P143673
CATALOG NUMBER: LDRL-5MQ-F06-E-8030

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P143673

CATALOG NUMBER: LDRL-5MQ-F06-E-8030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6495.7	0.0	6495.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6495.7	0.0	6495.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	12991.4	0.0	12991.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.8	0.7
10°-20°	299.9	2.3
20°-30°	572.9	4.4
30°-40°	1091.3	8.4
40°-50°	1879.3	14.5
50°-60°	3358.2	25.8
60°-70°	4090.4	31.5
70°-80°	1457.0	11.2
80°-90°	154.5	1.2
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°	12991.4	100.0
0°-180°	12991.4	100.0



REPORT NUMBER: P143673

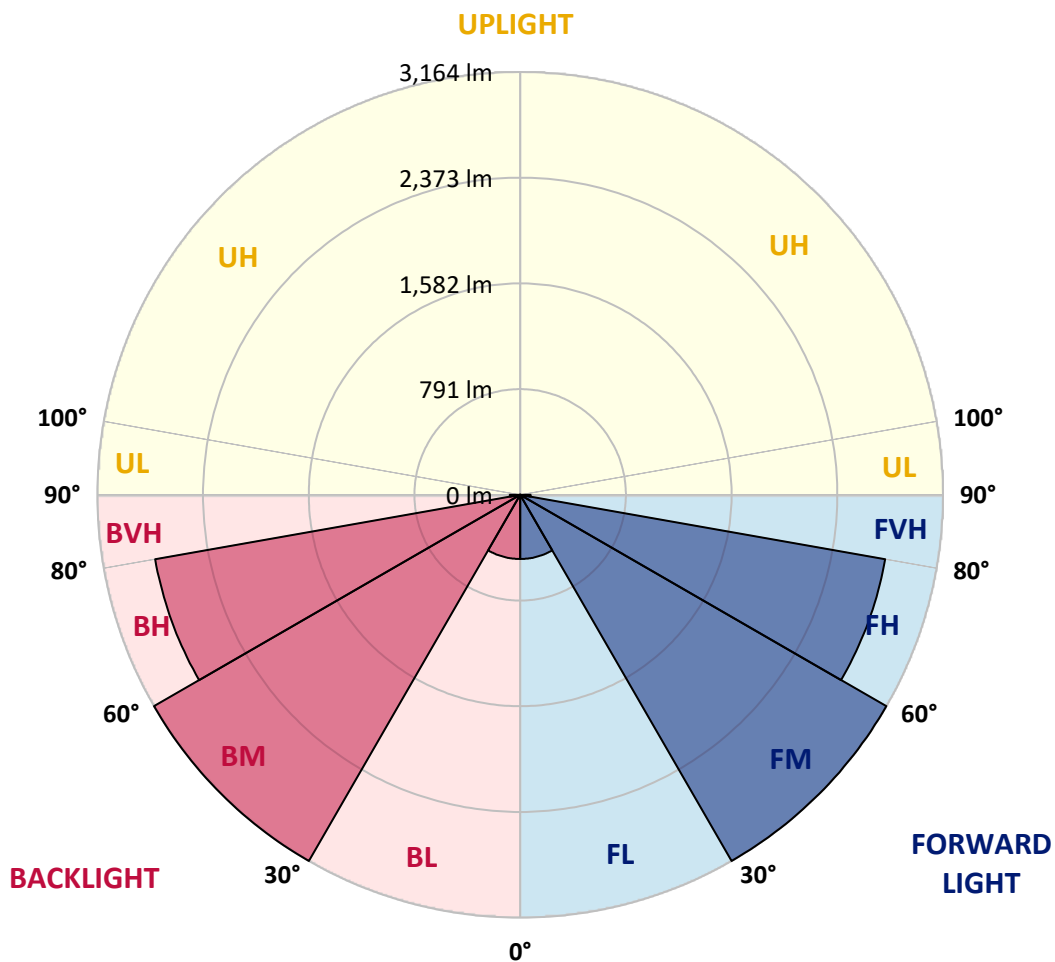
CATALOG NUMBER: LDRL-5MQ-F06-E-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	480.3	3.7			
FM	(30°-60°)	3164.4	24.4			
FH	(60°-80°)	2773.7	21.4			G2/5000
FVH	(80°-90°)	77.2	0.6			G1/100
BL	(0°-30°)	480.3	3.7	B1/500		
BM	(30°-60°)	3164.4	24.4	B3/5000		
BH	(60°-80°)	2773.7	21.4	B4/5000		G2/5000
BVH	(80°-90°)	77.2	0.6			G1/100
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





REPORT NUMBER: P143673

CATALOG NUMBER: LDRL-5MQ-F06-E-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	872.0	872.0	872.0	872.0	872.0	872.0	872.0	872.0	872.0	872.0	872.0
2.5°	878.7	877.9	878.7	877.1	877.1	876.2	876.2	876.2	874.5	876.2	874.5
5°	897.1	896.3	897.1	895.4	895.4	893.8	893.8	893.8	892.1	893.8	892.9
7.5°	928.9	930.6	928.9	927.2	927.2	925.5	924.7	924.7	923.9	923.0	924.7
10°	973.2	974.9	972.4	970.7	969.9	969.0	967.3	966.5	966.5	963.2	964.0
12.5°	1020.0	1020.0	1017.5	1016.7	1016.7	1015.0	1011.7	1010.8	1010.8	1009.2	1007.5
15°	1061.8	1061.8	1060.2	1056.8	1057.6	1055.1	1052.6	1051.0	1051.0	1049.3	1047.6
17.5°	1100.3	1100.3	1097.8	1094.4	1092.8	1091.9	1088.6	1086.9	1086.9	1085.2	1083.6
20°	1138.7	1140.4	1136.2	1132.9	1129.5	1126.2	1122.9	1121.2	1118.7	1119.5	1118.7
22.5°	1184.7	1185.6	1178.9	1174.7	1168.0	1163.8	1158.8	1157.1	1153.8	1153.8	1155.5
25°	1243.3	1242.4	1234.9	1227.4	1219.8	1211.5	1204.0	1202.3	1198.9	1198.1	1198.9
27.5°	1320.2	1319.3	1310.1	1300.1	1290.1	1277.5	1268.3	1263.3	1260.8	1257.5	1259.1
30°	1414.7	1416.3	1405.5	1393.7	1381.2	1366.2	1354.5	1347.8	1342.7	1339.4	1341.1
32.5°	1607.0	1605.3	1588.6	1563.5	1536.7	1501.6	1473.2	1461.5	1452.3	1448.9	1451.4
35°	1800.1	1798.4	1791.7	1784.2	1777.5	1754.9	1734.0	1709.8	1689.7	1677.2	1680.5
37.5°	1891.2	1891.2	1886.2	1884.5	1884.5	1897.9	1914.6	1944.7	1968.1	1969.8	1962.3
40°	2033.4	2033.4	2025.0	2020.8	2018.3	2022.5	2033.4	2044.2	2055.9	2058.4	2050.1
42.5°	2200.6	2193.0	2187.2	2178.8	2178.0	2182.2	2193.9	2207.3	2219.0	2229.0	2211.4
45°	2381.2	2374.5	2368.6	2363.6	2367.0	2377.8	2393.7	2417.1	2433.8	2448.9	2434.7
47.5°	2582.7	2568.4	2574.3	2569.3	2577.6	2599.4	2627.8	2662.9	2680.5	2707.2	2684.7
50°	2833.5	2836.8	2833.5	2833.5	2843.5	2871.9	2913.7	2961.4	2991.5	3006.6	2993.2
52.5°	3206.4	3196.3	3173.8	3180.5	3193.8	3239.0	3293.3	3360.2	3398.7	3434.6	3392.8
55°	3614.4	3616.1	3612.7	3621.9	3647.8	3693.8	3762.4	3863.5	3912.0	3974.7	3924.6
57.5°	3952.2	3963.9	3983.9	4011.5	4067.5	4144.5	4279.1	4433.7	4562.5	4630.2	4551.6
60°	4061.7	4073.4	4121.9	4198.8	4304.2	4461.3	4679.6	4944.6	5176.2	5296.6	5193.7
62.5°	3851.0	3872.7	3944.6	4050.8	4224.7	4470.5	4794.9	5187.1	5544.1	5708.8	5584.2
63°	3782.4	3806.7	3880.3	3988.1	4165.4	4422.0	4772.4	5192.1	5570.0	5743.9	5609.3
65°	3478.1	3494.0	3571.7	3694.6	3892.0	4159.5	4549.1	5045.8	5476.3	5677.8	5534.9
67.5°	2999.0	3019.9	3091.0	3197.2	3388.6	3672.1	4055.0	4550.0	4973.9	5135.2	5013.2
70°	2405.4	2428.8	2487.3	2586.0	2736.5	2999.0	3326.8	3789.1	4107.7	4233.9	4103.5
72.5°	1690.6	1700.6	1743.2	1846.9	1959.8	2168.8	2428.8	2788.3	3094.3	3177.1	3051.7
75°	715.7	716.5	772.5	838.6	979.9	1188.1	1414.7	1724.0	1999.1	2127.8	1969.0
77.5°	229.1	231.6	247.5	271.7	318.5	411.4	578.6	748.3	1000.8	1122.9	974.0
80°	191.5	194.8	201.5	206.5	209.9	214.9	234.1	260.9	328.6	382.1	308.5
82.5°	164.7	170.6	185.6	191.5	194.8	196.5	199.0	198.2	194.0	192.3	193.1
85°	125.4	139.6	156.3	169.7	171.4	172.2	177.2	178.9	165.5	152.2	165.5
87.5°	54.3	70.2	107.9	119.6	117.1	108.7	116.2	122.9	112.0	81.9	109.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P143673

CATALOG NUMBER: LDRL-5MQ-F06-E-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	872.0	872.0	872.0	872.0	872.0	872.0	872.0	872.0
2.5°	875.4	877.1	877.1	877.1	877.1	877.9	878.7	877.9
5°	893.8	895.4	894.6	895.4	895.4	896.3	897.1	896.3
7.5°	925.5	925.5	925.5	927.2	927.2	928.9	928.9	928.9
10°	964.8	964.0	964.0	965.7	967.3	968.2	969.9	969.0
12.5°	1007.5	1005.8	1006.6	1008.3	1010.0	1010.8	1012.5	1011.7
15°	1045.9	1045.1	1045.1	1047.6	1048.4	1049.3	1052.6	1052.6
17.5°	1082.7	1082.7	1082.7	1086.1	1086.9	1090.3	1092.8	1092.8
20°	1119.5	1119.5	1119.5	1122.9	1125.4	1130.4	1135.4	1134.6
22.5°	1157.1	1158.0	1159.6	1163.0	1168.8	1176.4	1180.5	1180.5
25°	1204.0	1207.3	1210.6	1215.7	1224.0	1234.1	1240.7	1243.3
27.5°	1264.2	1271.7	1280.0	1287.6	1296.8	1309.3	1318.5	1320.2
30°	1346.1	1357.0	1370.3	1380.4	1392.1	1406.3	1417.2	1423.0
32.5°	1462.3	1489.1	1506.6	1542.6	1564.3	1588.6	1608.6	1617.0
35°	1701.4	1728.2	1751.6	1775.8	1780.9	1789.2	1800.1	1802.6
37.5°	1938.0	1916.3	1895.4	1894.6	1888.7	1890.4	1893.7	1897.9
40°	2040.9	2034.2	2023.3	2027.5	2028.3	2028.3	2035.0	2035.9
42.5°	2206.4	2190.5	2178.0	2188.0	2189.7	2191.4	2198.1	2205.6
45°	2417.1	2392.9	2377.0	2371.1	2377.0	2375.3	2384.5	2386.2
47.5°	2657.9	2626.1	2590.2	2578.5	2575.1	2567.6	2583.5	2581.8
50°	2953.0	2902.0	2858.6	2841.8	2833.5	2829.3	2833.5	2833.5
52.5°	3326.8	3275.8	3216.4	3197.2	3190.5	3199.7	3186.3	3200.5
55°	3841.0	3758.2	3677.1	3651.2	3647.0	3642.8	3644.5	3650.3
57.5°	4419.5	4272.4	4163.7	4100.1	4059.2	4039.1	4017.4	4014.0
60°	4978.0	4710.5	4504.0	4363.5	4264.0	4188.8	4150.3	4136.9
62.5°	5247.3	4856.0	4534.9	4295.8	4147.8	4024.9	3957.2	3939.6
63°	5254.8	4837.6	4497.3	4244.8	4072.6	3962.2	3890.3	3871.9
65°	5115.2	4640.3	4241.4	3963.9	3781.6	3666.2	3577.6	3558.4
67.5°	4606.8	4146.1	3738.1	3456.4	3259.1	3166.2	3068.4	3065.9
70°	3780.8	3369.4	3025.8	2766.6	2601.9	2509.9	2410.4	2412.9
72.5°	2764.1	2398.7	2162.1	1959.8	1785.9	1698.9	1605.3	1614.5
75°	1663.8	1337.7	1124.5	949.0	770.0	663.0	591.1	550.1
77.5°	711.5	486.6	349.5	277.6	234.1	216.5	208.2	205.7
80°	247.5	219.1	206.5	203.2	200.7	197.3	191.5	185.6
82.5°	200.7	200.7	194.0	193.1	185.6	179.8	164.7	157.2
85°	178.1	174.7	168.9	166.4	164.7	152.2	132.9	122.9
87.5°	117.9	109.5	104.5	107.0	103.7	92.8	56.9	45.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)