

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: P143959

Luminaire Tested: **LDRL-5WQ-E05-E-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143959
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-E05-E-7030
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (105) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13999.7 lumens
Efficiency: N/A
Efficacy: 110.0 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

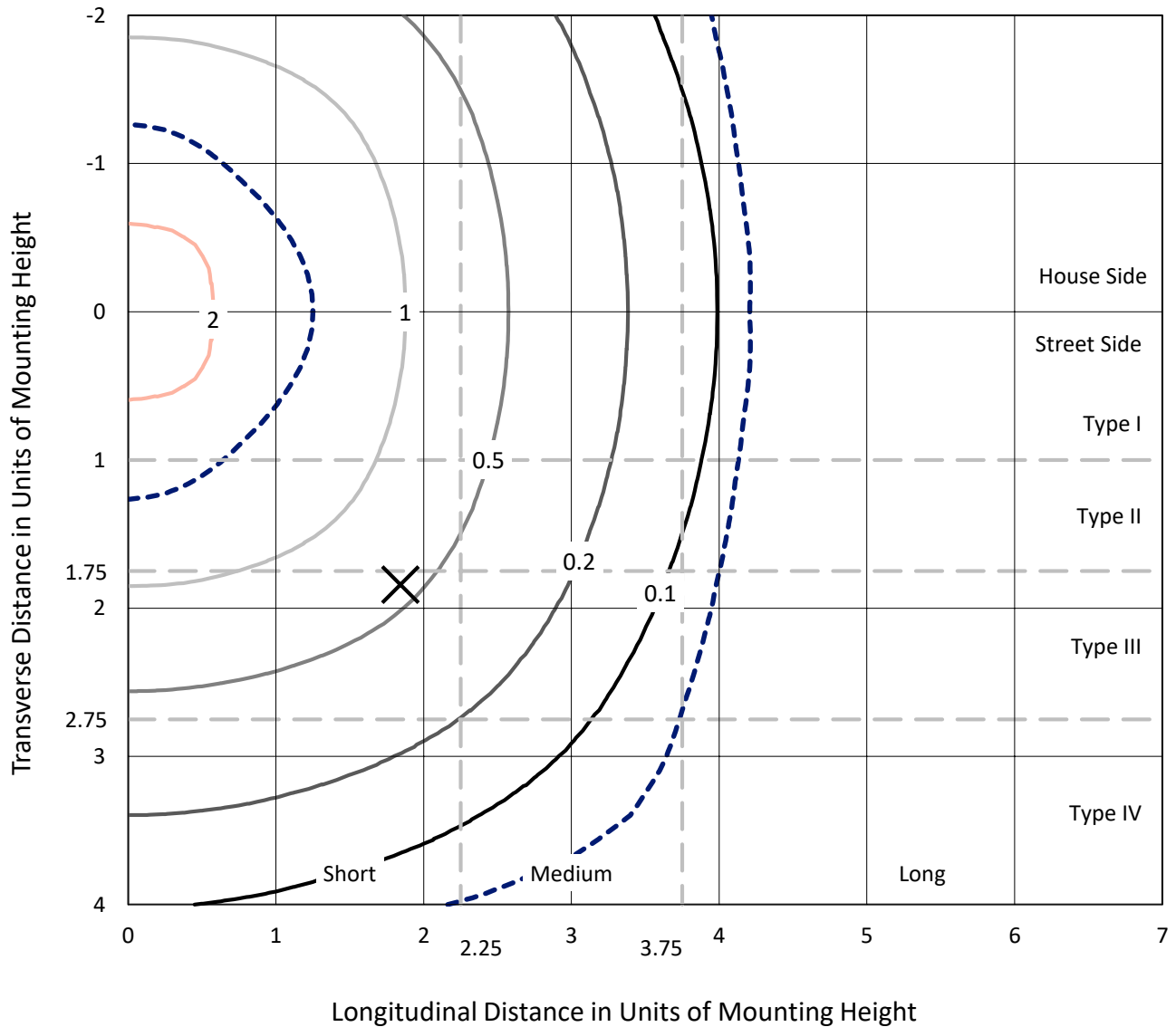
Input Watts (W): 127.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

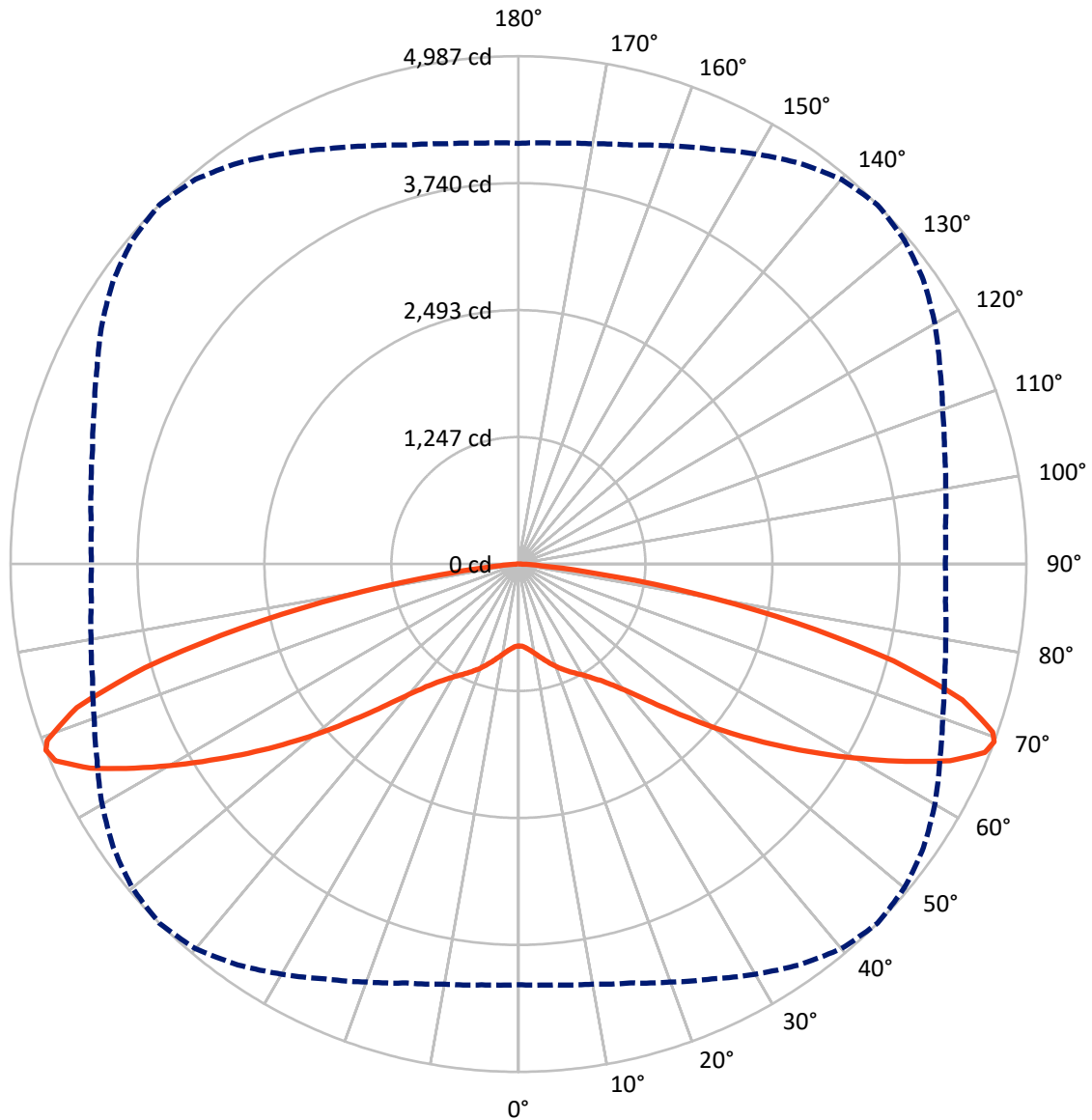


Based on 20 foot mounting height. Maximum calculated value = 2.2 fc
 Type V - Short - Semi-Cutoff

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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	6999.8	0.0	6999.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6999.8	0.0	6999.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	13999.7	0.0	13999.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.2	0.6
10°-20°	279.7	2.0
20°-30°	539.3	3.9
30°-40°	883.7	6.3
40°-50°	1536.6	11.0
50°-60°	2729.5	19.5
60°-70°	4237.7	30.3
70°-80°	3376.3	24.1
80°-90°	335.7	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°	13999.7	100.0
0°-180°	13999.7	100.0



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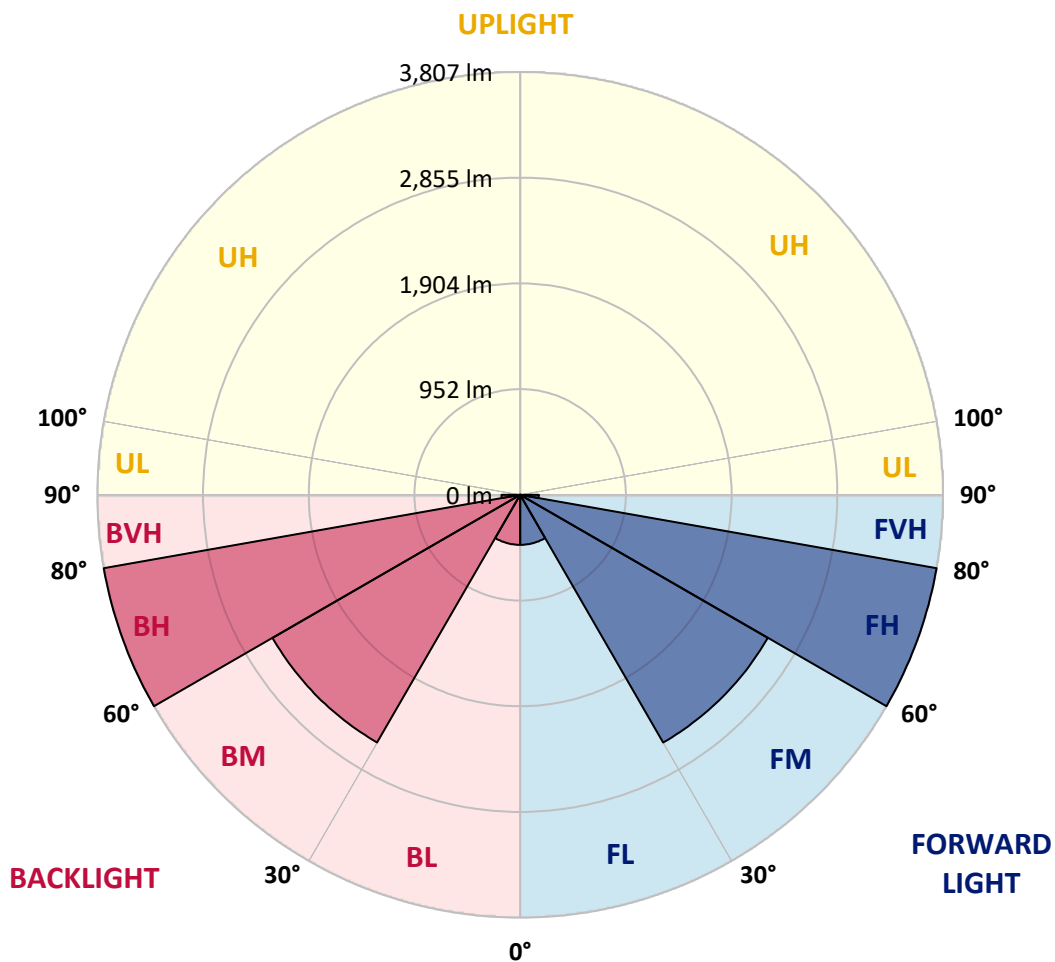
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	450.1	3.2			
FM	(30°-60°)	2574.9	18.4			
FH	(60°-80°)	3807.0	27.2			G2/5000
FVH	(80°-90°)	167.9	1.2			G2/225
BL	(0°-30°)	450.1	3.2	B1/500		
BM	(30°-60°)	2574.9	18.4	B3/5000		
BH	(60°-80°)	3807.0	27.2	B4/5000		G2/5000
BVH	(80°-90°)	167.9	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°	804.7	804.7	804.7	804.7	804.7	804.7	804.7	804.7	804.7	804.7	804.7
2.5°	811.1	811.1	811.1	810.1	810.1	809.2	810.1	809.2	809.2	809.2	809.2
5°	832.1	830.2	830.2	829.3	831.1	831.1	829.3	830.2	829.3	830.2	830.2
7.5°	858.5	858.5	858.5	857.6	859.5	858.5	857.6	858.5	858.5	857.6	857.6
10°	891.4	892.3	891.4	891.4	894.2	893.3	894.2	894.2	895.1	894.2	894.2
12.5°	929.8	929.8	930.7	931.6	932.5	933.4	936.2	935.3	937.1	935.3	935.3
15°	974.5	976.4	974.5	974.5	977.3	979.1	980.0	980.0	981.9	980.9	979.1
17.5°	1022.0	1023.0	1022.0	1021.1	1023.9	1026.6	1027.5	1027.5	1030.3	1028.4	1028.4
20°	1070.4	1071.4	1069.5	1068.6	1072.3	1072.3	1074.1	1075.0	1077.8	1078.7	1075.9
22.5°	1115.2	1116.1	1115.2	1114.3	1117.9	1117.9	1120.7	1121.6	1125.2	1124.3	1124.3
25°	1159.0	1159.0	1158.1	1158.1	1161.8	1162.7	1165.4	1167.3	1170.9	1170.9	1170.9
27.5°	1199.2	1200.1	1198.3	1197.4	1204.7	1207.4	1209.3	1212.9	1215.7	1217.5	1216.6
30°	1244.9	1244.9	1244.0	1246.7	1251.3	1254.9	1258.6	1264.1	1269.6	1267.7	1267.7
32.5°	1298.8	1300.6	1299.7	1303.4	1308.8	1314.3	1318.9	1325.3	1328.0	1332.6	1328.9
35°	1370.9	1374.6	1372.8	1376.4	1381.0	1384.6	1394.7	1401.1	1405.6	1408.4	1406.6
37.5°	1461.4	1459.5	1463.2	1464.1	1473.2	1477.8	1489.7	1498.8	1506.1	1508.9	1507.0
40°	1573.7	1571.0	1575.5	1580.1	1592.0	1596.5	1610.2	1623.9	1634.0	1637.6	1635.8
42.5°	1708.0	1711.6	1718.9	1725.3	1741.8	1754.5	1770.1	1790.2	1801.1	1805.7	1799.3
45°	1884.2	1877.8	1891.5	1908.0	1917.1	1945.4	1971.0	1992.0	2010.3	2017.6	2010.3
47.5°	2085.2	2084.3	2100.7	2120.8	2144.5	2171.0	2201.2	2228.6	2260.5	2262.4	2253.2
50°	2307.1	2325.4	2334.5	2354.6	2398.5	2431.3	2469.7	2510.8	2540.0	2549.2	2532.7
52.5°	2574.7	2588.4	2593.9	2627.7	2667.9	2708.1	2762.0	2811.3	2845.1	2848.7	2840.5
55°	2865.2	2876.1	2886.2	2927.3	2971.1	3006.7	3075.3	3123.7	3157.5	3170.2	3164.8
57.5°	3165.7	3175.7	3188.5	3233.3	3278.0	3328.2	3393.1	3449.7	3489.0	3512.7	3506.4
60°	3499.0	3499.0	3528.3	3573.0	3609.6	3668.9	3736.5	3802.3	3845.2	3882.7	3872.6
62.5°	3849.8	3859.8	3888.1	3924.7	3963.0	4017.8	4094.5	4173.1	4238.9	4267.2	4266.3
65°	4115.6	4133.8	4171.3	4213.3	4277.2	4342.1	4438.9	4536.6	4616.1	4657.2	4657.2
67.5°	4193.2	4205.1	4251.6	4315.6	4407.8	4511.0	4642.6	4778.6	4887.3	4941.2	4907.4
69°	4131.1	4148.4	4189.5	4259.0	4368.6	4494.6	4650.8	4805.1	4931.2	4986.9	4947.6
70°	4058.9	4078.1	4119.2	4187.7	4301.0	4435.2	4591.4	4757.6	4892.8	4940.3	4895.6
72.5°	3764.8	3788.6	3817.8	3877.2	3979.5	4105.5	4246.2	4392.3	4522.0	4559.4	4503.7
75°	3263.4	3268.0	3282.6	3326.4	3363.0	3452.5	3572.1	3688.1	3785.8	3807.8	3748.4
77.5°	2309.9	2285.2	2260.5	2298.0	2327.2	2442.3	2572.0	2667.0	2769.3	2800.3	2740.1
80°	1012.9	1003.8	1038.5	1087.8	1216.6	1293.3	1420.3	1556.3	1643.1	1744.5	1635.8
82.5°	200.0	211.0	243.9	301.4	371.7	467.6	550.8	644.8	729.8	768.1	728.9
85°	81.3	88.6	100.5	112.3	120.6	135.2	158.9	197.3	217.4	220.1	209.2
87.5°	33.8	39.3	53.0	63.0	63.9	61.2	63.0	64.8	53.0	42.9	53.9
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°	804.7	804.7	804.7	804.7	804.7	804.7	804.7	804.7
2.5°	809.2	810.1	809.2	810.1	809.2	809.2	810.1	809.2
5°	829.3	830.2	829.3	828.4	827.5	828.4	828.4	828.4
7.5°	857.6	856.7	855.8	855.8	854.9	854.0	855.8	855.8
10°	892.3	891.4	889.6	889.6	888.7	888.7	888.7	888.7
12.5°	934.4	931.6	930.7	928.0	927.1	926.1	926.1	927.1
15°	978.2	975.5	974.5	970.0	970.0	969.1	969.1	969.1
17.5°	1024.8	1022.0	1018.4	1018.4	1015.6	1013.8	1014.7	1012.9
20°	1072.3	1068.6	1066.8	1065.9	1062.2	1062.2	1062.2	1061.3
22.5°	1118.9	1116.1	1113.4	1109.7	1106.1	1105.2	1105.2	1104.2
25°	1166.3	1161.8	1156.3	1152.6	1149.0	1146.3	1146.3	1146.3
27.5°	1213.8	1208.4	1200.1	1195.6	1190.1	1187.4	1187.4	1186.4
30°	1264.1	1257.7	1250.4	1244.0	1236.7	1233.9	1233.0	1231.2
32.5°	1324.4	1318.0	1310.7	1301.5	1294.2	1289.7	1289.7	1286.9
35°	1401.1	1393.8	1388.3	1376.4	1367.3	1360.0	1360.9	1362.7
37.5°	1501.5	1492.4	1487.8	1473.2	1461.4	1454.1	1454.1	1453.1
40°	1629.4	1620.3	1610.2	1596.5	1581.9	1571.9	1569.1	1569.1
42.5°	1792.0	1783.8	1770.1	1750.9	1733.5	1722.6	1713.4	1714.4
45°	1995.7	1985.6	1966.4	1942.7	1921.7	1906.2	1893.4	1893.4
47.5°	2243.2	2222.2	2195.7	2174.7	2139.1	2115.3	2106.2	2104.4
50°	2525.4	2486.1	2453.3	2423.1	2385.7	2361.0	2347.3	2343.7
52.5°	2821.3	2780.2	2739.1	2699.9	2654.2	2628.6	2606.7	2604.9
55°	3142.8	3090.8	3038.7	3000.4	2946.5	2920.0	2898.1	2885.3
57.5°	3470.7	3412.3	3374.8	3320.0	3263.4	3244.2	3223.2	3207.7
60°	3839.7	3775.8	3726.5	3668.9	3632.4	3591.3	3571.2	3559.3
62.5°	4216.9	4157.6	4094.5	4039.7	3988.6	3960.3	3932.9	3919.2
65°	4600.5	4502.8	4427.9	4352.1	4291.8	4240.7	4197.8	4192.3
67.5°	4836.2	4712.9	4587.8	4477.2	4388.6	4316.5	4272.7	4257.1
69°	4855.4	4721.1	4564.9	4432.5	4330.2	4260.8	4208.7	4192.3
70°	4802.4	4667.2	4502.8	4360.3	4254.4	4178.6	4135.7	4108.2
72.5°	4415.1	4296.4	4138.4	3997.7	3901.8	3813.2	3770.3	3759.4
75°	3642.4	3516.4	3371.2	3303.6	3236.9	3181.2	3152.0	3149.2
77.5°	2586.6	2457.8	2347.3	2258.7	2186.6	2150.9	2159.2	2129.0
80°	1480.5	1312.5	1179.1	1100.6	993.7	929.8	857.6	909.7
82.5°	636.6	514.2	391.8	318.8	243.0	192.7	158.9	148.0
85°	178.1	145.2	121.5	111.4	100.5	89.5	75.8	70.3
87.5°	60.3	57.5	51.1	51.1	46.6	39.3	27.4	24.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)