

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: P143674

Luminaire Tested: **LDRL-5MQ-F06-E-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P143674  
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-7030  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (42) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14059 lumens  
Efficiency: N/A  
Efficacy: 89.8 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

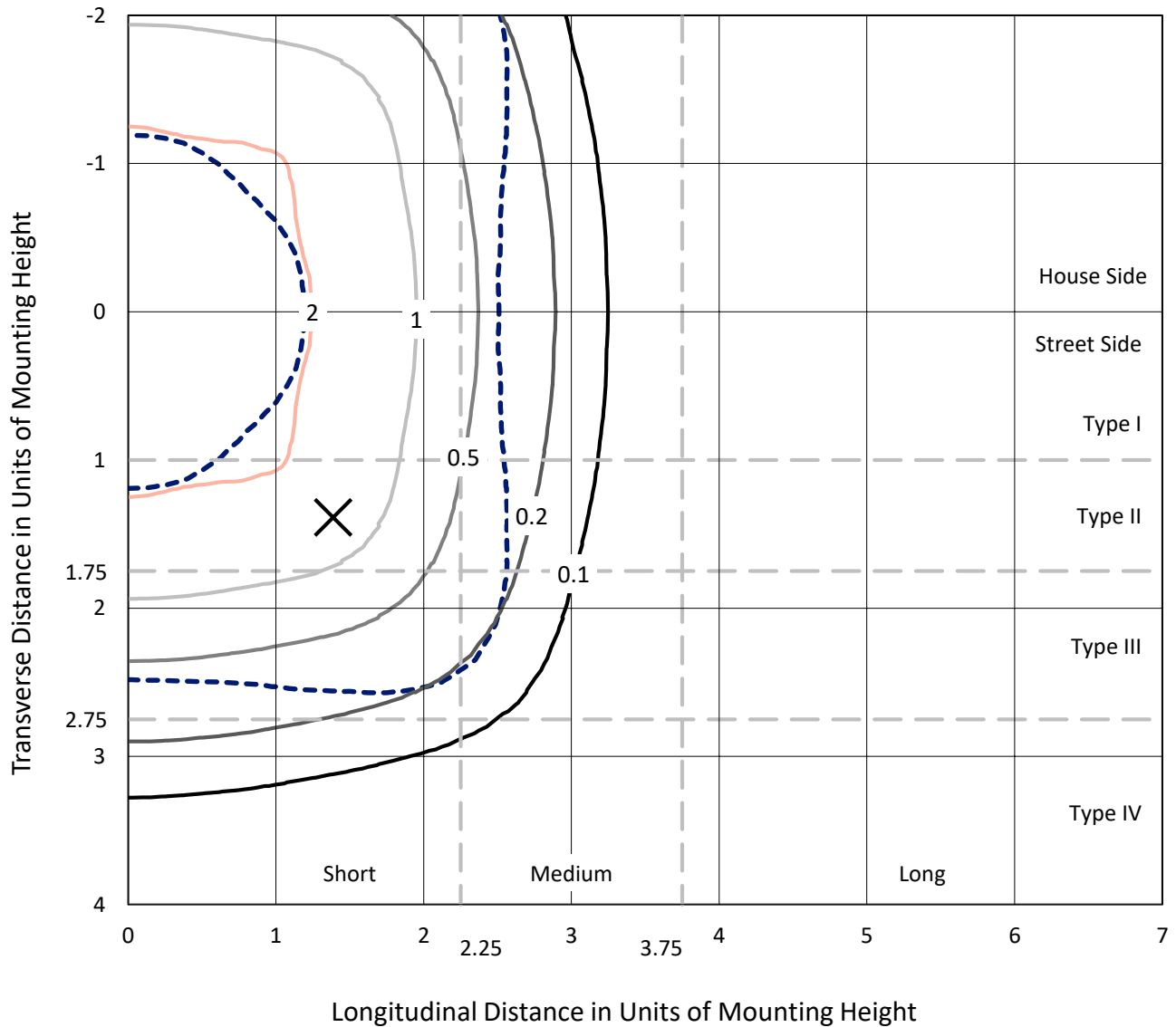
Input Watts (W): 156.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

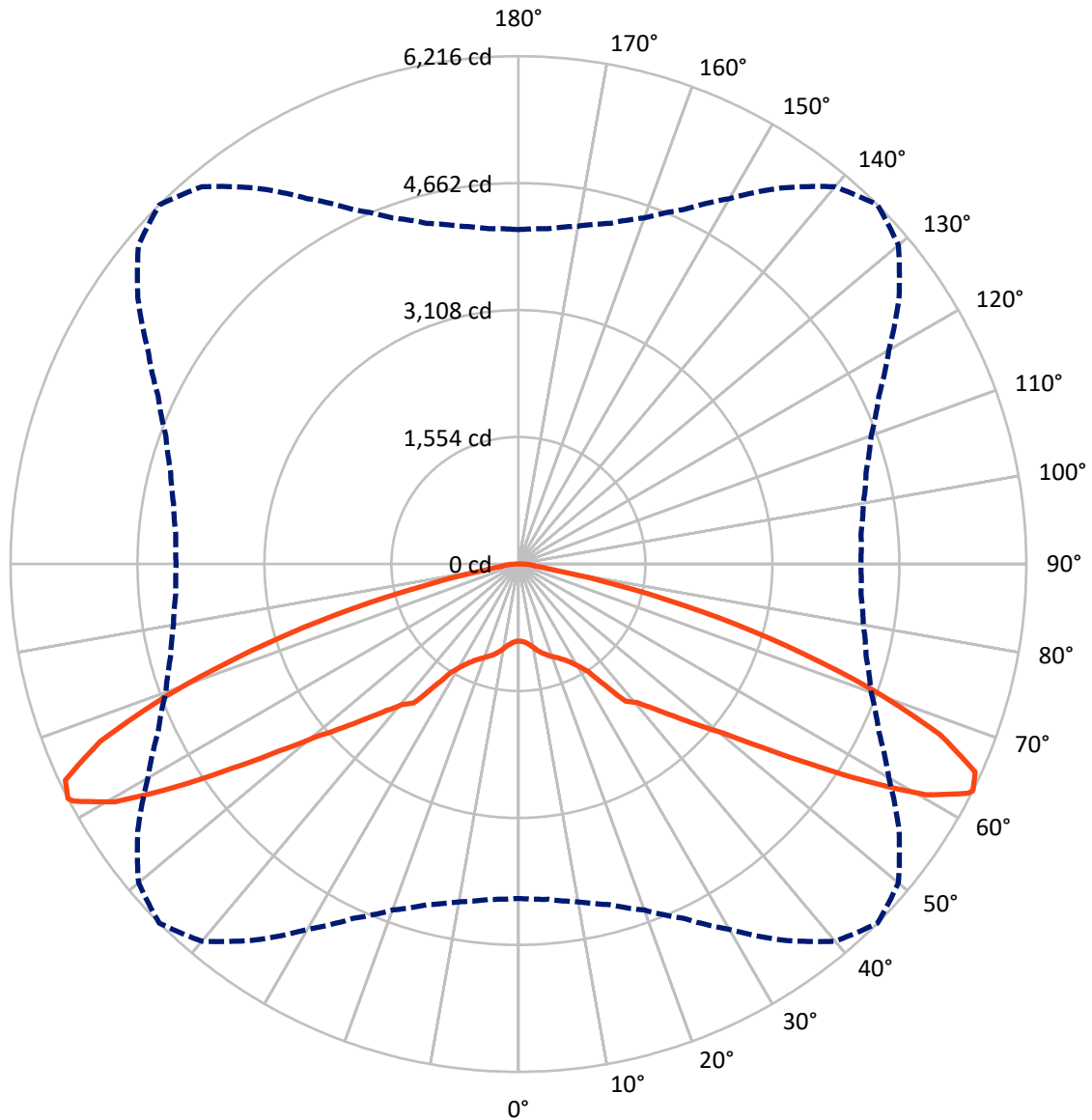
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.6 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7029.5	0.0	7029.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	7029.5	0.0	7029.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	14059.0	0.0	14059.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.0	0.7
10°-20°	324.6	2.3
20°-30°	620.0	4.4
30°-40°	1181.0	8.4
40°-50°	2033.7	14.5
50°-60°	3634.2	25.8
60°-70°	4426.5	31.5
70°-80°	1576.8	11.2
80°-90°	167.2	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°	14059.0	100.0
0°-180°	14059.0	100.0



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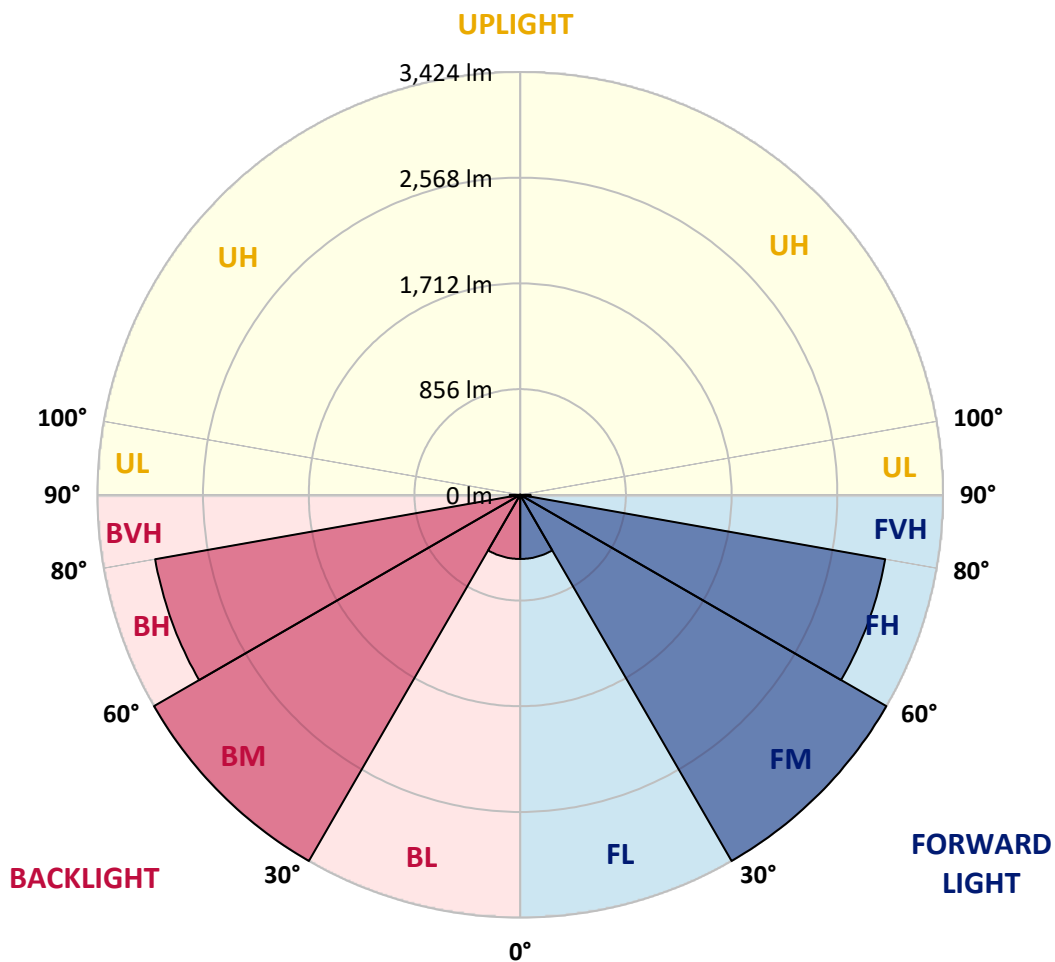
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	519.8	3.7			
FM (30°-60°)	3424.5	24.4			
FH (60°-80°)	3001.6	21.4			G2/5000
FVH (80°-90°)	83.6	0.6			G1/100
BL (0°-30°)	519.8	3.7	B2/1000		
BM (30°-60°)	3424.5	24.4	B3/5000		
BH (60°-80°)	3001.6	21.4	B4/5000		G2/5000
BVH (80°-90°)	83.6	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	943.7	943.7	943.7	943.7	943.7	943.7	943.7	943.7	943.7	943.7	943.7
2.5°	950.9	950.0	950.9	949.1	949.1	948.2	948.2	948.2	946.4	948.2	946.4
5°	970.8	969.9	970.8	969.0	969.0	967.2	967.2	967.2	965.4	967.2	966.3
7.5°	1005.2	1007.0	1005.2	1003.4	1003.4	1001.6	1000.7	1000.7	999.8	998.9	1000.7
10°	1053.2	1055.0	1052.3	1050.5	1049.6	1048.7	1046.8	1045.9	1045.9	1042.3	1043.2
12.5°	1103.8	1103.8	1101.1	1100.2	1100.2	1098.4	1094.8	1093.9	1093.9	1092.1	1090.3
15°	1149.1	1149.1	1147.3	1143.7	1144.6	1141.8	1139.1	1137.3	1137.3	1135.5	1133.7
17.5°	1190.7	1190.7	1188.0	1184.4	1182.6	1181.7	1178.0	1176.2	1176.2	1174.4	1172.6
20°	1232.3	1234.1	1229.6	1226.0	1222.4	1218.8	1215.1	1213.3	1210.6	1211.5	1210.6
22.5°	1282.1	1283.0	1275.8	1271.2	1264.0	1259.5	1254.0	1252.2	1248.6	1248.6	1250.4
25°	1345.4	1344.5	1336.4	1328.2	1320.1	1311.0	1302.9	1301.1	1297.5	1296.6	1297.5
27.5°	1428.7	1427.8	1417.8	1407.0	1396.1	1382.5	1372.6	1367.1	1364.4	1360.8	1362.6
30°	1530.9	1532.7	1521.0	1508.3	1494.7	1478.4	1465.8	1458.5	1453.1	1449.5	1451.3
32.5°	1739.0	1737.2	1719.1	1692.0	1663.0	1625.0	1594.2	1581.6	1571.6	1568.0	1570.7
35°	1948.0	1946.2	1939.0	1930.8	1923.6	1899.2	1876.5	1850.3	1828.6	1815.0	1818.6
37.5°	2046.6	2046.6	2041.2	2039.4	2039.4	2053.9	2072.0	2104.5	2129.9	2131.7	2123.5
40°	2200.5	2200.5	2191.4	2186.9	2184.2	2188.7	2200.5	2212.2	2224.9	2227.6	2218.6
42.5°	2381.4	2373.3	2366.9	2357.9	2357.0	2361.5	2374.2	2388.7	2401.3	2412.2	2393.2
45°	2576.8	2569.6	2563.3	2557.8	2561.5	2573.2	2590.4	2615.8	2633.8	2650.1	2634.8
47.5°	2794.9	2779.5	2785.9	2780.4	2789.5	2813.0	2843.8	2881.8	2900.8	2929.7	2905.3
50°	3066.3	3070.0	3066.3	3066.3	3077.2	3108.0	3153.2	3204.8	3237.3	3253.6	3239.2
52.5°	3469.9	3459.0	3434.6	3441.8	3456.3	3505.2	3564.0	3636.4	3678.0	3716.9	3671.6
55°	3911.4	3913.2	3909.6	3919.6	3947.6	3997.4	4071.6	4181.0	4233.5	4301.4	4247.1
57.5°	4277.0	4289.6	4311.3	4341.2	4401.8	4485.1	4630.7	4798.1	4937.5	5010.7	4925.7
60°	4395.5	4408.1	4460.6	4543.9	4657.9	4828.0	5064.1	5350.9	5601.6	5731.9	5620.6
62.5°	4167.5	4191.0	4268.8	4383.7	4571.9	4837.9	5189.0	5613.3	5999.7	6177.9	6043.1
63°	4093.3	4119.5	4199.1	4315.9	4507.7	4785.4	5164.6	5618.8	6027.7	6215.9	6070.3
65°	3763.9	3781.1	3865.3	3998.3	4211.8	4501.3	4923.0	5460.4	5926.4	6144.4	5989.7
67.5°	3245.5	3268.1	3345.0	3459.9	3667.1	3973.8	4388.2	4923.9	5382.6	5557.2	5425.1
70°	2603.1	2628.4	2691.8	2798.5	2961.4	3245.5	3600.2	4100.5	4445.2	4581.9	4440.7
72.5°	1829.5	1840.3	1886.5	1998.7	2120.8	2347.0	2628.4	3017.5	3348.6	3438.2	3302.5
75°	774.5	775.4	836.0	907.5	1060.4	1285.7	1530.9	1865.7	2163.4	2302.7	2130.8
77.5°	247.9	250.6	267.8	294.1	344.7	445.2	626.1	809.8	1083.0	1215.1	1054.1
80°	207.2	210.8	218.1	223.5	227.1	232.5	253.3	282.3	355.6	413.5	333.9
82.5°	178.2	184.6	200.9	207.2	210.8	212.6	215.3	214.4	209.9	208.1	209.0
85°	135.7	151.1	169.2	183.7	185.5	186.4	191.8	193.6	179.1	164.7	179.1
87.5°	58.8	76.0	116.7	129.4	126.7	117.6	125.8	133.0	121.2	88.7	118.5
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°	943.7	943.7	943.7	943.7	943.7	943.7	943.7	943.7
2.5°	947.3	949.1	949.1	949.1	949.1	950.0	950.9	950.0
5°	967.2	969.0	968.1	969.0	969.0	969.9	970.8	969.9
7.5°	1001.6	1001.6	1001.6	1003.4	1003.4	1005.2	1005.2	1005.2
10°	1044.1	1043.2	1043.2	1045.0	1046.8	1047.7	1049.6	1048.7
12.5°	1090.3	1088.5	1089.4	1091.2	1093.0	1093.9	1095.7	1094.8
15°	1131.9	1131.0	1131.0	1133.7	1134.6	1135.5	1139.1	1139.1
17.5°	1171.7	1171.7	1171.7	1175.3	1176.2	1179.8	1182.6	1182.6
20°	1211.5	1211.5	1211.5	1215.1	1217.9	1223.3	1228.7	1227.8
22.5°	1252.2	1253.1	1254.9	1258.6	1264.9	1273.0	1277.6	1277.6
25°	1302.9	1306.5	1310.1	1315.6	1324.6	1335.5	1342.7	1345.4
27.5°	1368.0	1376.2	1385.2	1393.4	1403.3	1416.9	1426.9	1428.7
30°	1456.7	1468.5	1483.0	1493.8	1506.5	1521.9	1533.6	1540.0
32.5°	1582.5	1611.4	1630.4	1669.3	1692.9	1719.1	1740.8	1749.9
35°	1841.3	1870.2	1895.5	1921.8	1927.2	1936.3	1948.0	1950.7
37.5°	2097.3	2073.8	2051.2	2050.3	2043.9	2045.7	2049.4	2053.9
40°	2208.6	2201.4	2189.6	2194.1	2195.0	2195.0	2202.3	2203.2
42.5°	2387.7	2370.6	2357.0	2367.8	2369.7	2371.5	2378.7	2386.8
45°	2615.8	2589.5	2572.3	2566.0	2572.3	2570.5	2580.5	2582.3
47.5°	2876.3	2842.0	2803.0	2790.4	2786.8	2778.6	2795.8	2794.0
50°	3195.7	3140.5	3093.5	3075.4	3066.3	3061.8	3066.3	3066.3
52.5°	3600.2	3545.0	3480.7	3459.9	3452.7	3462.6	3448.2	3463.5
55°	4156.6	4067.0	3979.3	3951.2	3946.7	3942.2	3944.0	3950.3
57.5°	4782.7	4623.5	4505.9	4437.1	4392.8	4371.1	4347.5	4343.9
60°	5387.1	5097.6	4874.1	4722.1	4614.4	4533.0	4491.4	4476.9
62.5°	5678.5	5255.0	4907.6	4648.8	4488.7	4355.7	4282.4	4263.4
63°	5686.6	5235.1	4866.9	4593.6	4407.2	4287.8	4210.0	4190.1
65°	5535.5	5021.6	4590.0	4289.6	4092.4	3967.5	3871.6	3850.8
67.5°	4985.4	4486.9	4045.3	3740.4	3526.9	3426.4	3320.6	3317.9
70°	4091.5	3646.3	3274.4	2994.0	2815.7	2716.2	2608.5	2611.2
72.5°	2991.2	2595.8	2339.8	2120.8	1932.6	1838.5	1737.2	1747.2
75°	1800.5	1447.7	1216.9	1026.9	833.3	717.5	639.7	595.4
77.5°	770.0	526.6	378.2	300.4	253.3	234.3	225.3	222.6
80°	267.8	237.1	223.5	219.9	217.2	213.5	207.2	200.9
82.5°	217.2	217.2	209.9	209.0	200.9	194.5	178.2	170.1
85°	192.7	189.1	182.8	180.1	178.2	164.7	143.9	133.0
87.5°	127.6	118.5	113.1	115.8	112.2	100.4	61.5	48.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)