

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: P144310

Luminaire Tested: **LDRC-5XQ-E04-E**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P144310
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33699)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRC-5XQ-E04-E
Description: RC LED ROADWAY SMALL CUTOFF COBRAHEAD LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (84) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12368.4 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B4 - U0 - G3

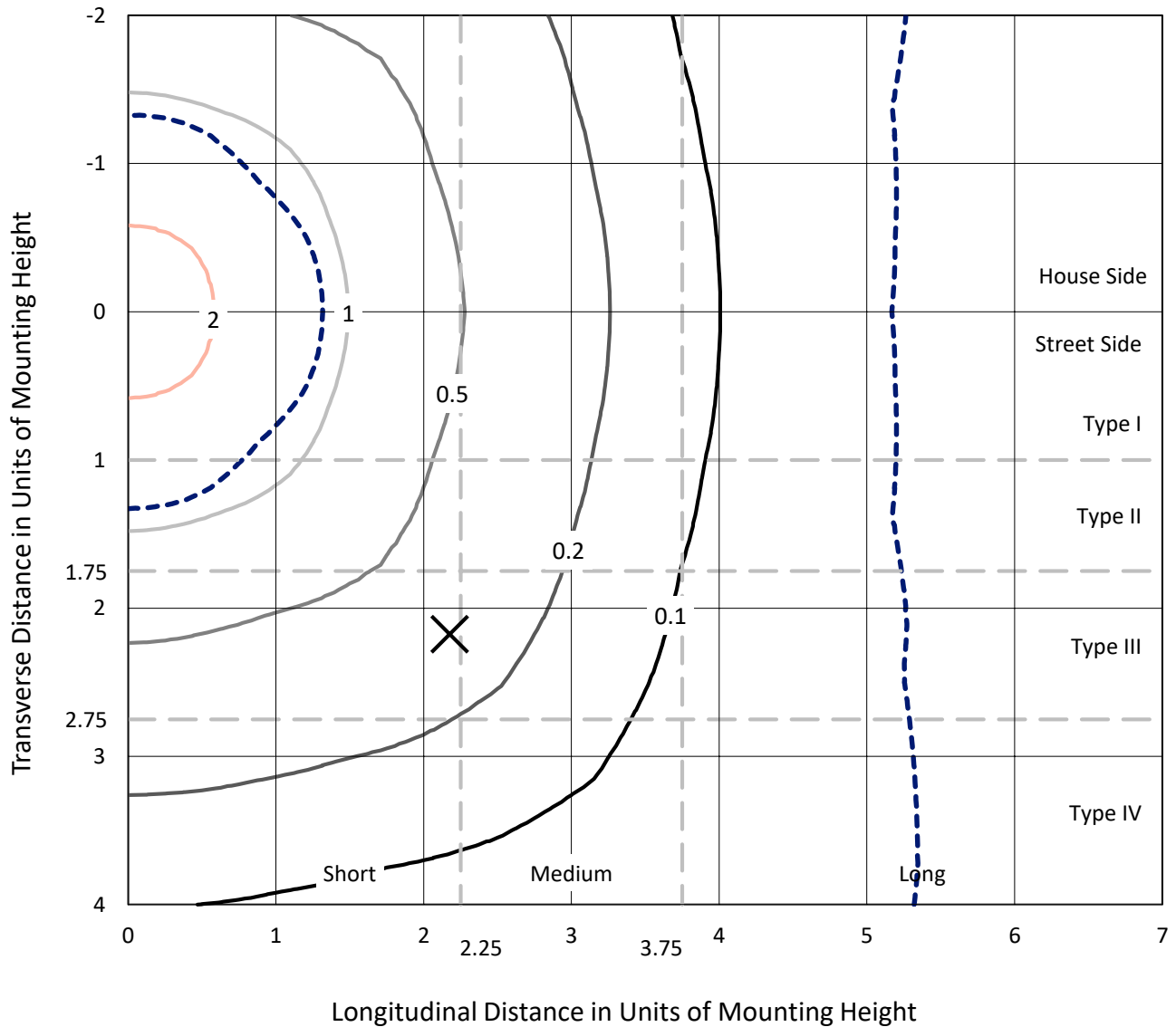
Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

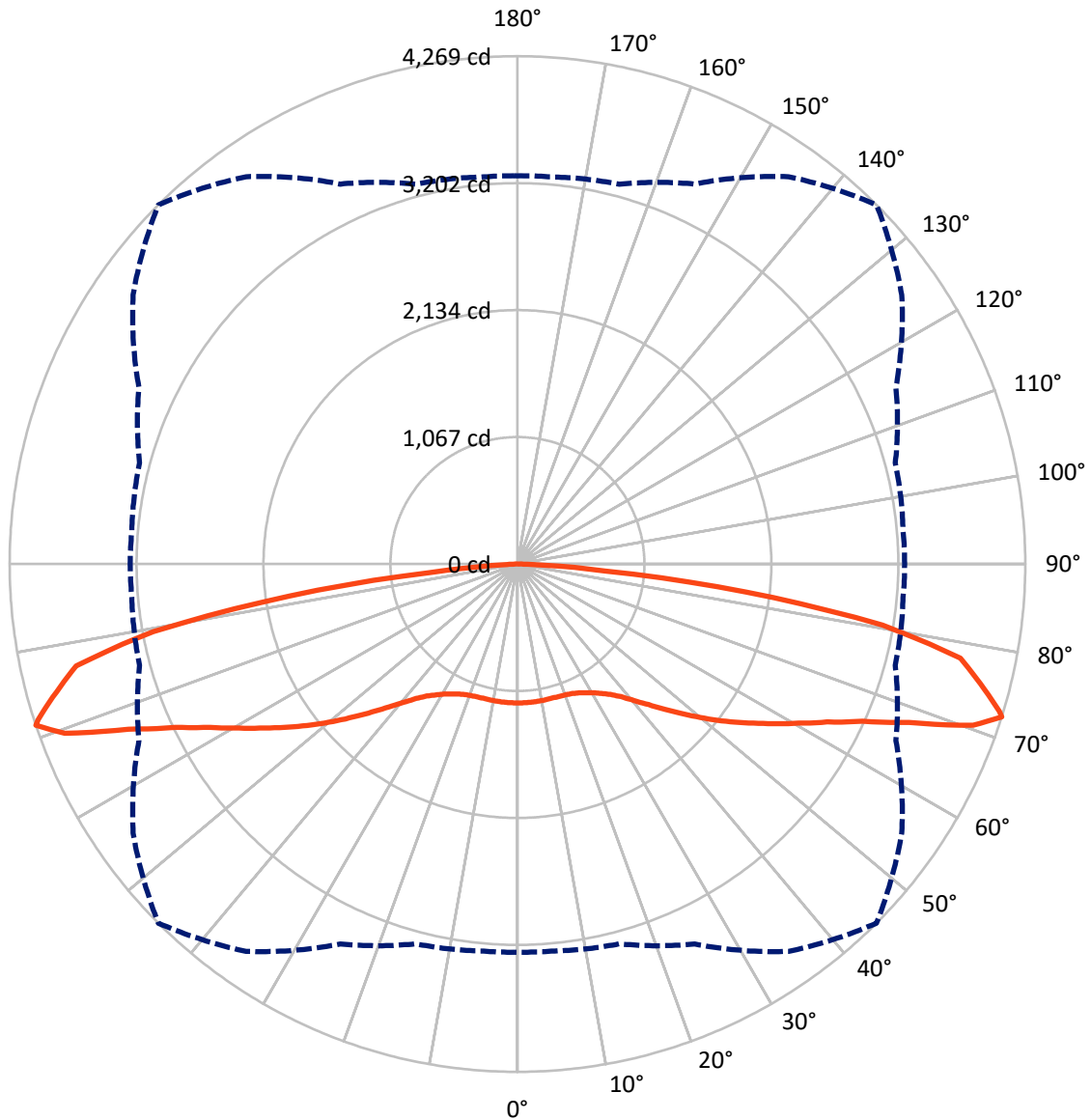
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.9 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6184.2	0.0	6184.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6184.2	0.0	6184.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	12368.4	0.0	12368.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.5	0.9
10°-20°	331.2	2.7
20°-30°	556.3	4.5
30°-40°	846.6	6.8
40°-50°	1338.4	10.8
50°-60°	2044.2	16.5
60°-70°	2994.8	24.2
70°-80°	3402.3	27.5
80°-90°	743.2	6.0
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°	12368.4	100.0
0°-180°	12368.4	100.0



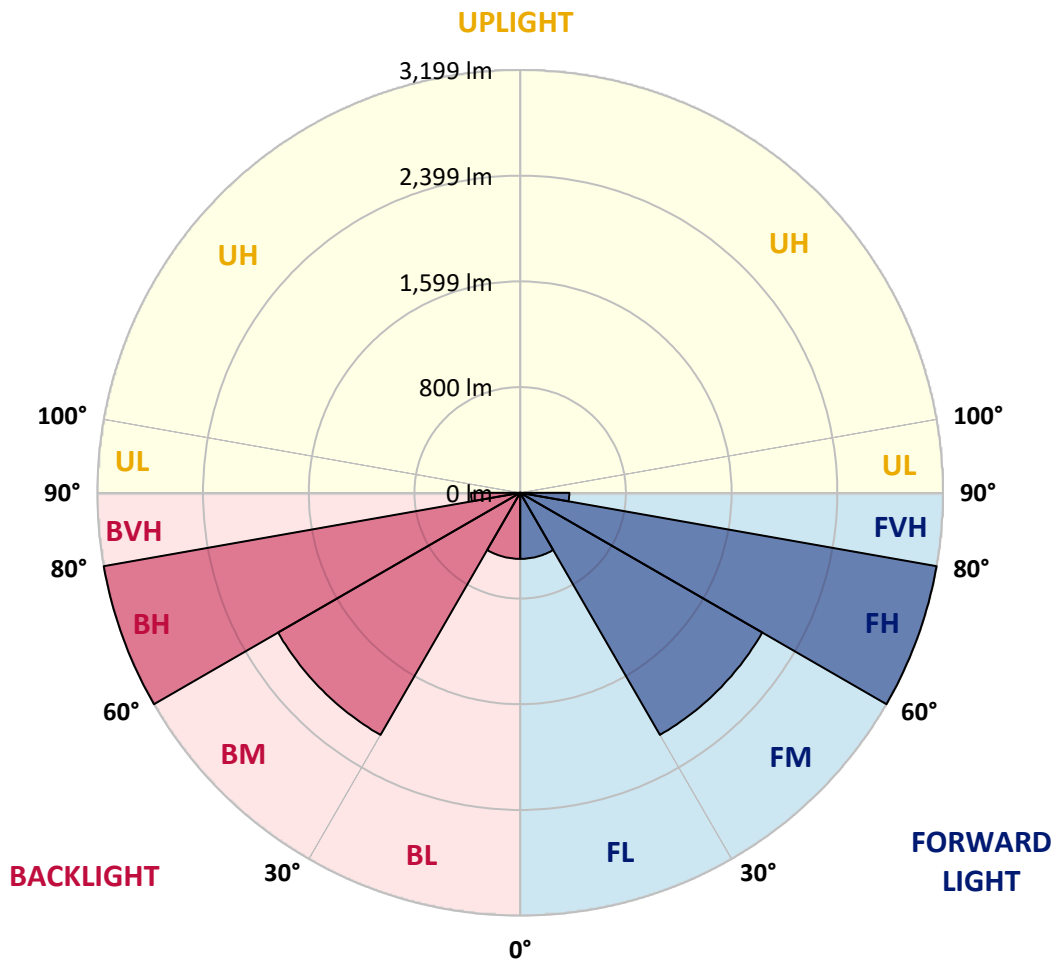
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	499.4	4.0			
FM	(30°-60°)	2114.6	17.1			
FH	(60°-80°)	3198.6	25.9			G2/5000
FVH	(80°-90°)	371.6	3.0			G3/500
BL	(0°-30°)	499.4	4.0	B1/500		
BM	(30°-60°)	2114.6	17.1	B2/2500		
BH	(60°-80°)	3198.6	25.9	B4/5000		G2/5000
BVH	(80°-90°)	371.6	3.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1168.0	1168.0	1168.0	1168.0	1168.0	1168.0	1168.0	1168.0	1168.0	1168.0	1168.0
2.5°	1170.4	1170.0	1169.2	1168.4	1168.0	1167.6	1167.6	1167.6	1167.4	1167.2	1167.4
5°	1170.4	1170.0	1169.4	1168.8	1168.2	1167.6	1167.6	1167.6	1167.4	1167.2	1167.6
7.5°	1168.8	1169.2	1168.6	1168.0	1167.8	1167.6	1167.4	1167.2	1166.8	1166.4	1166.6
10°	1169.2	1170.8	1169.6	1168.4	1168.0	1167.6	1166.8	1166.0	1165.8	1165.6	1165.2
12.5°	1170.0	1171.6	1170.2	1168.8	1168.2	1167.6	1166.8	1166.0	1165.4	1164.8	1164.2
15°	1172.4	1173.6	1172.4	1171.2	1170.0	1168.8	1168.0	1167.2	1166.0	1164.8	1164.2
17.5°	1174.0	1176.0	1174.6	1173.2	1171.8	1170.4	1169.6	1168.8	1168.0	1167.2	1166.2
20°	1176.8	1178.8	1177.6	1176.4	1175.6	1174.8	1174.2	1173.6	1173.0	1172.4	1171.0
22.5°	1182.0	1183.6	1183.2	1182.8	1183.0	1183.2	1183.4	1183.6	1183.2	1182.8	1181.4
25°	1192.8	1192.8	1193.6	1194.4	1195.6	1196.8	1197.8	1198.8	1199.4	1200.0	1198.2
27.5°	1211.6	1213.2	1213.8	1214.4	1216.4	1218.4	1220.6	1222.8	1224.0	1225.2	1223.4
30°	1236.0	1236.0	1237.4	1238.8	1242.2	1245.6	1248.4	1251.2	1253.4	1255.6	1254.2
32.5°	1267.2	1269.2	1271.2	1273.2	1277.4	1281.6	1286.4	1291.2	1294.0	1296.8	1294.6
35°	1314.8	1317.2	1319.2	1321.2	1325.6	1330.0	1335.4	1340.8	1343.2	1345.6	1344.2
37.5°	1382.0	1382.0	1384.8	1387.6	1390.4	1393.2	1400.4	1407.6	1410.6	1413.6	1411.2
40°	1472.8	1473.2	1473.8	1474.4	1477.0	1479.6	1488.4	1497.2	1502.4	1507.6	1502.6
42.5°	1577.2	1581.6	1581.4	1581.2	1583.0	1584.8	1593.2	1601.6	1609.0	1616.4	1613.4
45°	1700.4	1699.6	1698.0	1696.4	1701.8	1707.2	1719.2	1731.2	1737.8	1744.4	1738.2
47.5°	1824.8	1823.6	1821.4	1819.2	1824.6	1830.0	1848.0	1866.0	1875.4	1884.8	1874.8
50°	1948.8	1953.6	1950.8	1948.0	1956.0	1964.0	1986.8	2009.6	2023.4	2037.2	2025.6
52.5°	2086.0	2089.6	2086.4	2083.2	2094.2	2105.2	2132.2	2159.2	2177.6	2196.0	2180.4
55°	2228.0	2223.6	2225.4	2227.2	2237.6	2248.0	2281.2	2314.4	2336.4	2358.4	2340.8
57.5°	2360.8	2362.4	2360.6	2358.8	2375.2	2391.6	2433.4	2475.2	2502.8	2530.4	2508.4
60°	2496.8	2497.2	2493.2	2489.2	2507.0	2524.8	2584.8	2644.8	2680.6	2716.4	2686.2
62.5°	2648.8	2648.4	2641.4	2634.4	2655.4	2676.4	2750.8	2825.2	2874.4	2923.6	2886.8
65°	2835.2	2830.4	2826.4	2822.4	2846.6	2870.8	2963.2	3055.6	3122.0	3188.4	3141.0
67.5°	3110.0	3106.4	3098.0	3089.6	3116.6	3143.6	3262.0	3380.4	3466.2	3552.0	3489.4
70°	3412.4	3405.6	3411.4	3417.2	3479.6	3542.0	3700.8	3859.6	3961.2	4062.8	3957.6
72°	3263.2	3266.0	3285.4	3304.8	3414.2	3523.6	3749.2	3974.8	4121.8	4268.8	4106.2
72.5°	3211.2	3213.6	3235.6	3257.6	3362.0	3466.4	3699.0	3931.6	4083.8	4236.0	4068.8
75°	2990.4	2996.8	3022.2	3047.6	3153.4	3259.2	3493.8	3728.4	3874.2	4020.0	3852.6
77.5°	2630.0	2650.0	2675.8	2701.6	2827.6	2953.6	3218.8	3484.0	3645.0	3806.0	3616.0
80°	2007.2	2000.0	2044.4	2088.8	2209.2	2329.6	2534.8	2740.0	2925.4	3110.8	2897.2
82.5°	780.0	797.2	889.2	981.2	1107.4	1233.6	1417.4	1601.2	1768.2	1935.2	1757.4
85°	80.4	91.6	124.6	157.6	226.4	295.2	407.2	519.2	629.0	738.8	619.6
87.5°	32.4	35.6	45.8	56.0	58.6	61.2	74.0	86.8	86.2	85.6	84.4
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°	1168.0	1168.0	1168.0	1168.0	1168.0	1168.0	1168.0	1168.0
2.5°	1167.6	1168.0	1168.4	1168.4	1168.4	1169.0	1169.6	1168.8
5°	1168.0	1168.2	1168.4	1168.4	1168.4	1169.0	1169.6	1168.8
7.5°	1166.8	1166.8	1166.8	1167.4	1168.0	1168.2	1168.4	1168.0
10°	1164.8	1165.0	1165.2	1165.8	1166.4	1167.0	1167.6	1168.0
12.5°	1163.6	1163.8	1164.0	1164.6	1165.2	1165.8	1166.4	1167.2
15°	1163.6	1163.8	1164.0	1164.4	1164.8	1165.6	1166.4	1167.2
17.5°	1165.2	1164.8	1164.4	1164.8	1165.2	1166.2	1167.2	1168.0
20°	1169.6	1169.0	1168.4	1168.4	1168.4	1169.4	1170.4	1170.4
22.5°	1180.0	1178.0	1176.0	1175.6	1175.2	1175.4	1175.6	1176.0
25°	1196.4	1193.2	1190.0	1189.0	1188.0	1187.6	1187.2	1188.0
27.5°	1221.6	1218.0	1214.4	1212.2	1210.0	1208.8	1207.6	1208.0
30°	1252.8	1248.6	1244.4	1240.8	1237.2	1235.6	1234.0	1234.4
32.5°	1292.4	1287.4	1282.4	1277.6	1272.8	1270.6	1268.4	1268.8
35°	1342.8	1337.0	1331.2	1327.2	1323.2	1319.8	1316.4	1319.2
37.5°	1408.8	1403.4	1398.0	1395.4	1392.8	1389.8	1386.8	1387.2
40°	1497.6	1492.0	1486.4	1484.2	1482.0	1478.2	1474.4	1475.2
42.5°	1610.4	1602.0	1593.6	1589.6	1585.6	1583.8	1582.0	1583.2
45°	1732.0	1723.6	1715.2	1711.8	1708.4	1703.6	1698.8	1703.2
47.5°	1864.8	1854.2	1843.6	1837.6	1831.6	1833.2	1834.8	1831.2
50°	2014.0	1996.2	1978.4	1971.4	1964.4	1964.4	1964.4	1964.0
52.5°	2164.8	2140.2	2115.6	2109.6	2103.6	2102.2	2100.8	2099.2
55°	2323.2	2293.0	2262.8	2251.6	2240.4	2242.0	2243.6	2248.0
57.5°	2486.4	2446.6	2406.8	2394.0	2381.2	2382.2	2383.2	2390.4
60°	2656.0	2604.6	2553.2	2539.0	2524.8	2528.6	2532.4	2536.8
62.5°	2850.0	2787.8	2725.6	2706.6	2687.6	2692.4	2697.2	2708.8
65°	3093.6	3016.0	2938.4	2918.6	2898.8	2901.0	2903.2	2923.2
67.5°	3426.8	3323.4	3220.0	3201.8	3183.6	3186.8	3190.0	3222.4
70°	3852.4	3699.2	3546.0	3470.6	3395.2	3383.4	3371.6	3388.8
72°	3943.6	3727.2	3510.8	3399.6	3288.4	3271.0	3253.6	3255.2
72.5°	3901.6	3682.8	3464.0	3356.0	3248.0	3233.8	3219.6	3216.8
75°	3685.2	3471.2	3257.2	3145.6	3034.0	3007.0	2980.0	2980.0
77.5°	3426.0	3156.2	2886.4	2766.0	2645.6	2617.4	2589.2	2567.2
80°	2683.6	2441.8	2200.0	2077.8	1955.6	1910.4	1865.2	1838.4
82.5°	1579.6	1357.2	1134.8	979.6	824.4	777.8	731.2	666.4
85°	500.4	385.0	269.6	210.4	151.2	122.2	93.2	81.6
87.5°	83.2	67.6	52.0	50.2	48.4	38.0	27.6	23.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)