

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: P143661

Luminaire Tested: **LDRL-5MQ-E05-E-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143661
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-E05-E-7050
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (105) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15944 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

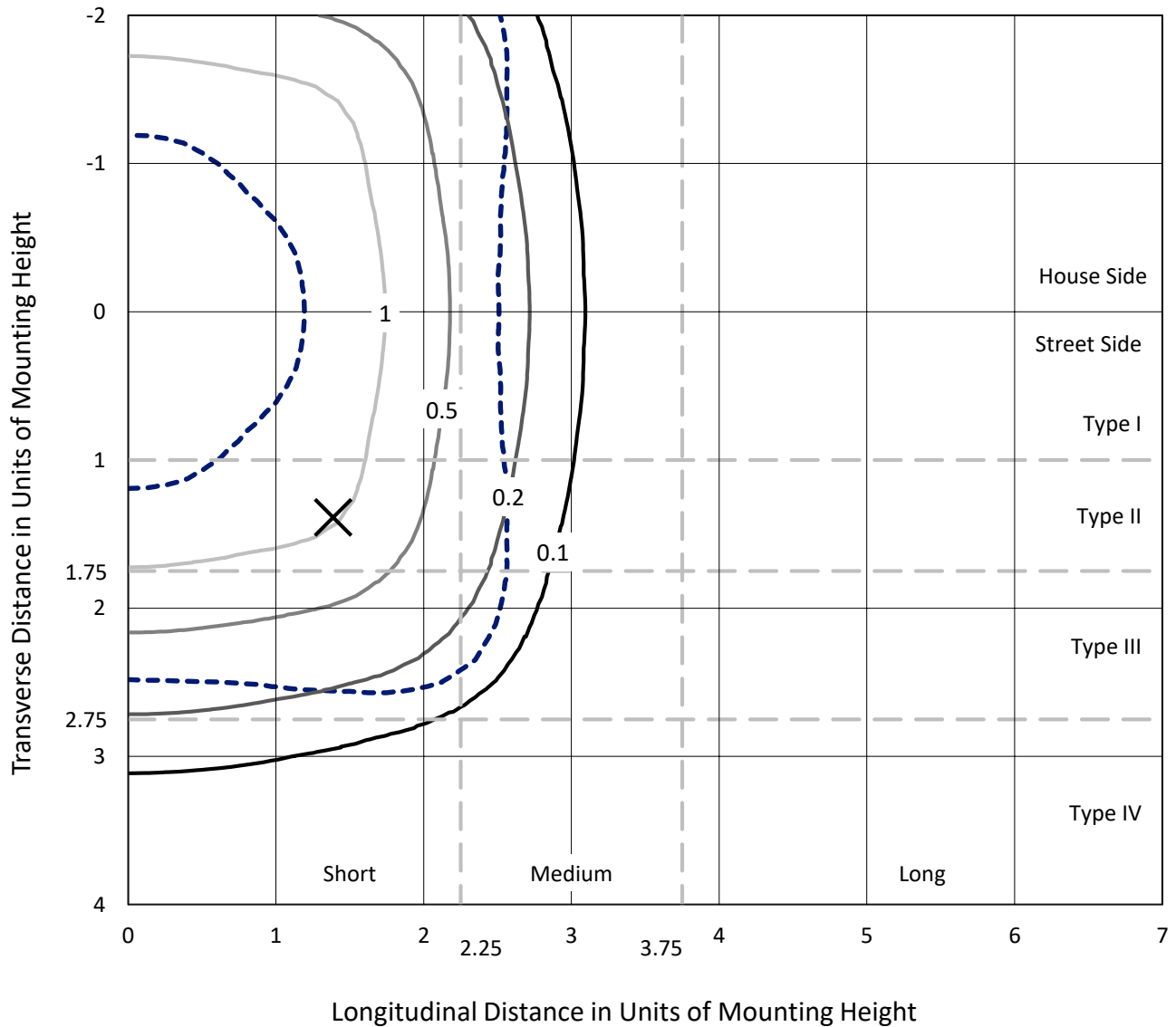
Input Watts (W): 127.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P143661
 CATALOG NUMBER: LDRL-5MQ-E05-E-7050

Iso-Footcandle Lines of Horizontal Illumination

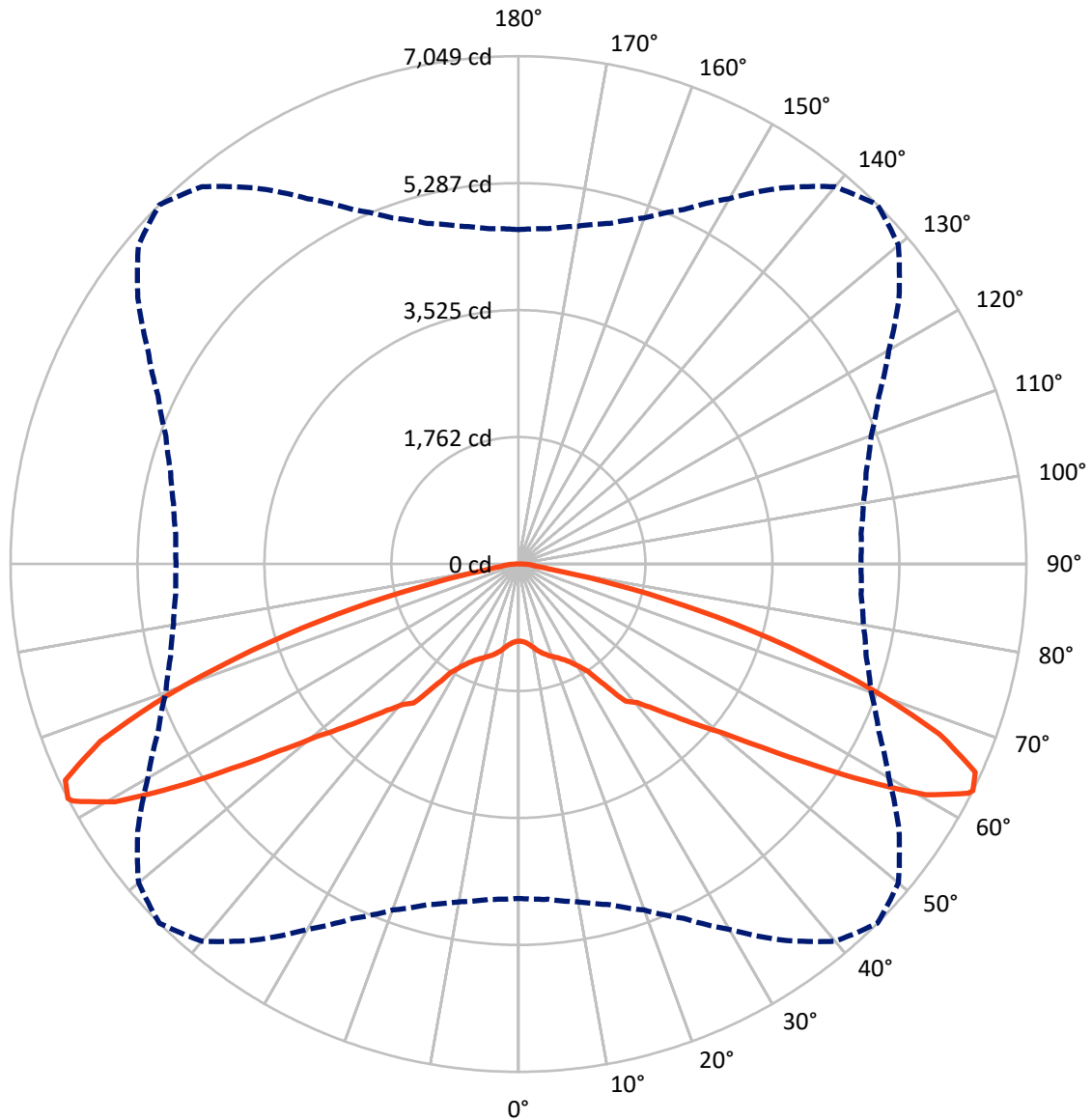
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P143661
CATALOG NUMBER: LDRL-5MQ-E05-E-7050

Luminous Intensity Polar Plot



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

REPORT NUMBER: P143661

CATALOG NUMBER: LDRL-5MQ-E05-E-7050

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7972.0	0.0	7972.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7972.0	0.0	7972.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	15944.0	0.0	15944.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.7	0.7
10°-20°	368.1	2.3
20°-30°	703.1	4.4
30°-40°	1339.4	8.4
40°-50°	2306.4	14.5
50°-60°	4121.5	25.8
60°-70°	5020.0	31.5
70°-80°	1788.2	11.2
80°-90°	189.6	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°	15944.0	100.0
0°-180°	15944.0	100.0



REPORT NUMBER: P143661

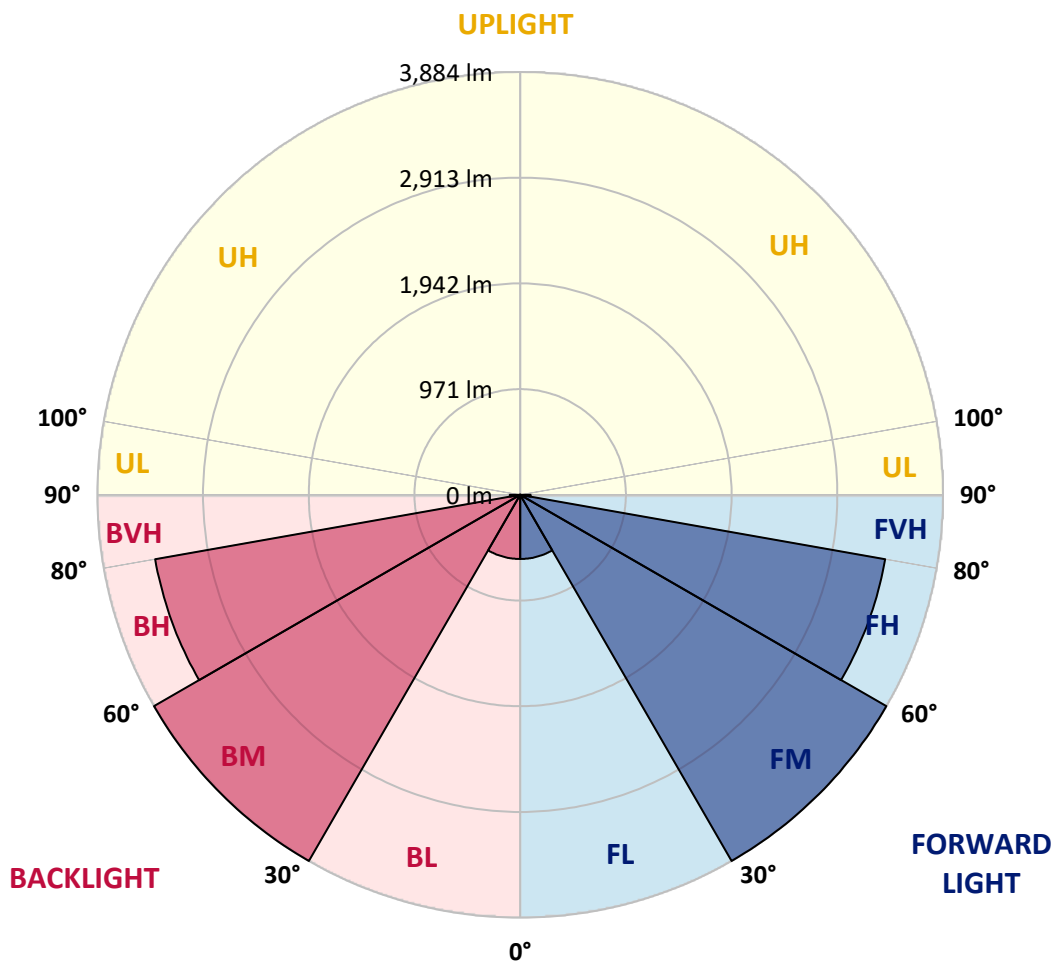
CATALOG NUMBER: LDRL-5MQ-E05-E-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	589.5	3.7			
FM	(30°-60°)	3883.6	24.4			
FH	(60°-80°)	3404.1	21.4			G2/5000
FVH	(80°-90°)	94.8	0.6			G1/100
BL	(0°-30°)	589.5	3.7	B2/1000		
BM	(30°-60°)	3883.6	24.4	B3/5000		
BH	(60°-80°)	3404.1	21.4	B4/5000		G2/5000
BVH	(80°-90°)	94.8	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: P143661

CATALOG NUMBER: LDRL-5MQ-E05-E-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2
2.5°	1078.4	1077.4	1078.4	1076.4	1076.4	1075.4	1075.4	1075.4	1073.3	1075.4	1073.3
5°	1101.0	1100.0	1101.0	1099.0	1099.0	1096.9	1096.9	1096.9	1094.9	1096.9	1095.9
7.5°	1140.0	1142.1	1140.0	1138.0	1138.0	1135.9	1134.9	1134.9	1133.8	1132.8	1134.9
10°	1194.4	1196.4	1193.4	1191.3	1190.3	1189.3	1187.2	1186.2	1186.2	1182.1	1183.1
12.5°	1251.8	1251.8	1248.8	1247.7	1247.7	1245.7	1241.6	1240.6	1240.6	1238.5	1236.5
15°	1303.2	1303.2	1301.1	1297.0	1298.0	1294.9	1291.9	1289.8	1289.8	1287.8	1285.7
17.5°	1350.4	1350.4	1347.3	1343.2	1341.1	1340.1	1336.0	1333.9	1333.9	1331.9	1329.8
20°	1397.6	1399.6	1394.5	1390.4	1386.3	1382.2	1378.1	1376.0	1372.9	1374.0	1372.9
22.5°	1454.0	1455.0	1446.8	1441.7	1433.5	1428.3	1422.2	1420.1	1416.0	1416.0	1418.1
25°	1525.8	1524.8	1515.6	1506.3	1497.1	1486.8	1477.6	1475.5	1471.4	1470.4	1471.4
27.5°	1620.2	1619.2	1607.9	1595.6	1583.3	1567.9	1556.6	1550.4	1547.4	1543.3	1545.3
30°	1736.2	1738.2	1724.9	1710.5	1695.1	1676.7	1662.3	1654.1	1647.9	1643.8	1645.9
32.5°	1972.2	1970.1	1949.6	1918.8	1886.0	1842.9	1808.0	1793.6	1782.3	1778.2	1781.3
35°	2209.2	2207.2	2198.9	2189.7	2181.5	2153.8	2128.1	2098.4	2073.8	2058.4	2062.5
37.5°	2321.1	2321.1	2314.9	2312.8	2312.8	2329.3	2349.8	2386.7	2415.5	2417.5	2408.3
40°	2495.5	2495.5	2485.2	2480.1	2477.0	2482.1	2495.5	2508.8	2523.2	2526.3	2516.0
42.5°	2700.7	2691.5	2684.3	2674.0	2673.0	2678.1	2692.5	2708.9	2723.3	2735.6	2714.0
45°	2922.3	2914.1	2907.0	2900.8	2904.9	2918.2	2937.7	2966.5	2987.0	3005.5	2988.0
47.5°	3169.6	3152.2	3159.4	3153.2	3163.5	3190.2	3225.0	3268.1	3289.7	3322.5	3294.8
50°	3477.5	3481.6	3477.5	3477.5	3489.8	3524.7	3576.0	3634.5	3671.4	3689.9	3673.5
52.5°	3935.1	3922.8	3895.1	3903.3	3919.7	3975.1	4041.8	4123.9	4171.1	4215.2	4163.9
55°	4435.9	4437.9	4433.8	4445.1	4476.9	4533.3	4617.5	4741.6	4801.1	4878.1	4816.5
57.5°	4850.4	4864.8	4889.4	4923.3	4992.0	5086.4	5251.6	5441.4	5599.5	5682.6	5586.1
60°	4984.8	4999.2	5058.7	5153.1	5282.4	5475.3	5743.1	6068.4	6352.6	6500.4	6374.2
62.5°	4726.2	4752.9	4841.2	4971.5	5184.9	5486.6	5884.7	6366.0	6804.1	7006.2	6853.4
63°	4642.1	4671.9	4762.2	4894.5	5112.1	5427.1	5857.0	6372.1	6835.9	7049.3	6884.1
65°	4268.6	4288.1	4383.5	4534.4	4776.5	5104.9	5583.0	6192.5	6721.0	6968.3	6792.8
67.5°	3680.6	3706.3	3793.5	3923.8	4158.8	4506.7	4976.6	5584.1	6104.3	6302.3	6152.5
70°	2952.1	2980.8	3052.7	3173.7	3358.4	3680.6	4082.9	4650.3	5041.3	5196.2	5036.1
72.5°	2074.8	2087.1	2139.4	2266.7	2405.2	2661.7	2980.8	3422.1	3797.6	3899.2	3745.3
75°	878.3	879.4	948.1	1029.2	1202.6	1458.1	1736.2	2115.8	2453.4	2611.4	2416.5
77.5°	281.2	284.2	303.7	333.5	390.9	504.8	710.1	918.4	1228.2	1378.1	1195.4
80°	235.0	239.1	247.3	253.4	257.6	263.7	287.3	320.1	403.3	468.9	378.6
82.5°	202.1	209.3	227.8	235.0	239.1	241.1	244.2	243.2	238.1	236.0	237.0
85°	153.9	171.4	191.9	208.3	210.4	211.4	217.5	219.6	203.2	186.8	203.2
87.5°	66.7	86.2	132.4	146.7	143.7	133.4	142.6	150.8	137.5	100.6	134.4
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: P143661

CATALOG NUMBER: LDRL-5MQ-E05-E-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2
2.5°	1074.3	1076.4	1076.4	1076.4	1076.4	1077.4	1078.4	1077.4
5°	1096.9	1099.0	1097.9	1099.0	1099.0	1100.0	1101.0	1100.0
7.5°	1135.9	1135.9	1135.9	1138.0	1138.0	1140.0	1140.0	1140.0
10°	1184.1	1183.1	1183.1	1185.2	1187.2	1188.2	1190.3	1189.3
12.5°	1236.5	1234.4	1235.4	1237.5	1239.5	1240.6	1242.6	1241.6
15°	1283.7	1282.6	1282.6	1285.7	1286.7	1287.8	1291.9	1291.9
17.5°	1328.8	1328.8	1328.8	1332.9	1333.9	1338.0	1341.1	1341.1
20°	1374.0	1374.0	1374.0	1378.1	1381.1	1387.3	1393.5	1392.4
22.5°	1420.1	1421.2	1423.2	1427.3	1434.5	1443.7	1448.9	1448.9
25°	1477.6	1481.7	1485.8	1492.0	1502.2	1514.5	1522.7	1525.8
27.5°	1551.5	1560.7	1571.0	1580.2	1591.5	1606.9	1618.2	1620.2
30°	1652.0	1665.4	1681.8	1694.1	1708.5	1725.9	1739.2	1746.4
32.5°	1794.7	1827.5	1849.0	1893.2	1919.8	1949.6	1974.2	1984.5
35°	2088.1	2121.0	2149.7	2179.4	2185.6	2195.9	2209.2	2212.3
37.5°	2378.5	2351.8	2326.2	2325.2	2318.0	2320.0	2324.1	2329.3
40°	2504.7	2496.5	2483.2	2488.3	2489.3	2489.3	2497.5	2498.6
42.5°	2707.9	2688.4	2673.0	2685.3	2687.4	2689.4	2697.6	2706.9
45°	2966.5	2936.7	2917.2	2910.0	2917.2	2915.2	2926.5	2928.5
47.5°	3262.0	3223.0	3178.9	3164.5	3160.4	3151.2	3170.7	3168.6
50°	3624.2	3561.6	3508.3	3487.7	3477.5	3472.3	3477.5	3477.5
52.5°	4082.9	4020.3	3947.4	3923.8	3915.6	3926.9	3910.5	3927.9
55°	4713.9	4612.3	4512.8	4481.0	4475.9	4470.7	4472.8	4480.0
57.5°	5424.0	5243.4	5110.0	5032.0	4981.7	4957.1	4930.4	4926.3
60°	6109.4	5781.1	5527.6	5355.2	5233.1	5140.8	5093.6	5077.2
62.5°	6439.8	5959.6	5565.6	5272.1	5090.5	4939.7	4856.6	4835.0
63°	6449.1	5937.0	5519.4	5209.5	4998.2	4862.7	4774.5	4751.9
65°	6277.7	5694.9	5205.4	4864.8	4641.1	4499.5	4390.7	4367.1
67.5°	5653.8	5088.5	4587.7	4241.9	3999.8	3885.9	3765.8	3762.7
70°	4640.0	4135.2	3713.5	3395.4	3193.2	3080.4	2958.3	2961.3
72.5°	3392.3	2943.9	2653.5	2405.2	2191.8	2085.0	1970.1	1981.4
75°	2041.9	1641.8	1380.1	1164.6	945.0	813.7	725.5	675.2
77.5°	873.2	597.2	428.9	340.7	287.3	265.8	255.5	252.4
80°	303.7	268.8	253.4	249.3	246.3	242.2	235.0	227.8
82.5°	246.3	246.3	238.1	237.0	227.8	220.6	202.1	192.9
85°	218.6	214.5	207.3	204.2	202.1	186.8	163.2	150.8
87.5°	144.7	134.4	128.3	131.3	127.2	113.9	69.8	55.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)