

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: P143974

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143974
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-F06-E-7030
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (42) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13868.5 lumens
Efficiency: N/A
Efficacy: 88.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G2

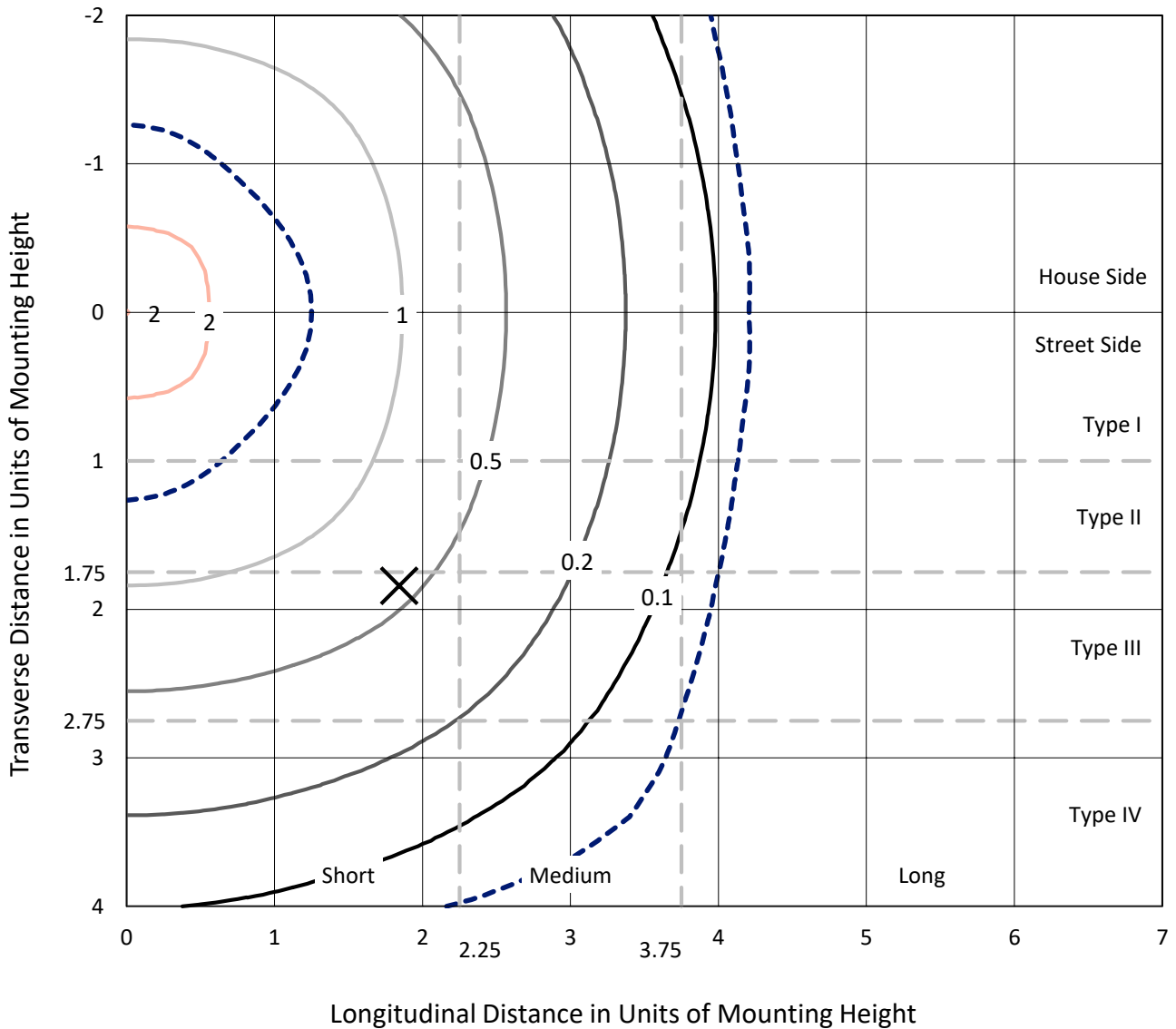
Input Watts (W): 156.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P143974
 CATALOG NUMBER: LDRL-5WQ-F06-E-7030

Iso-Footcandle Lines of Horizontal Illumination

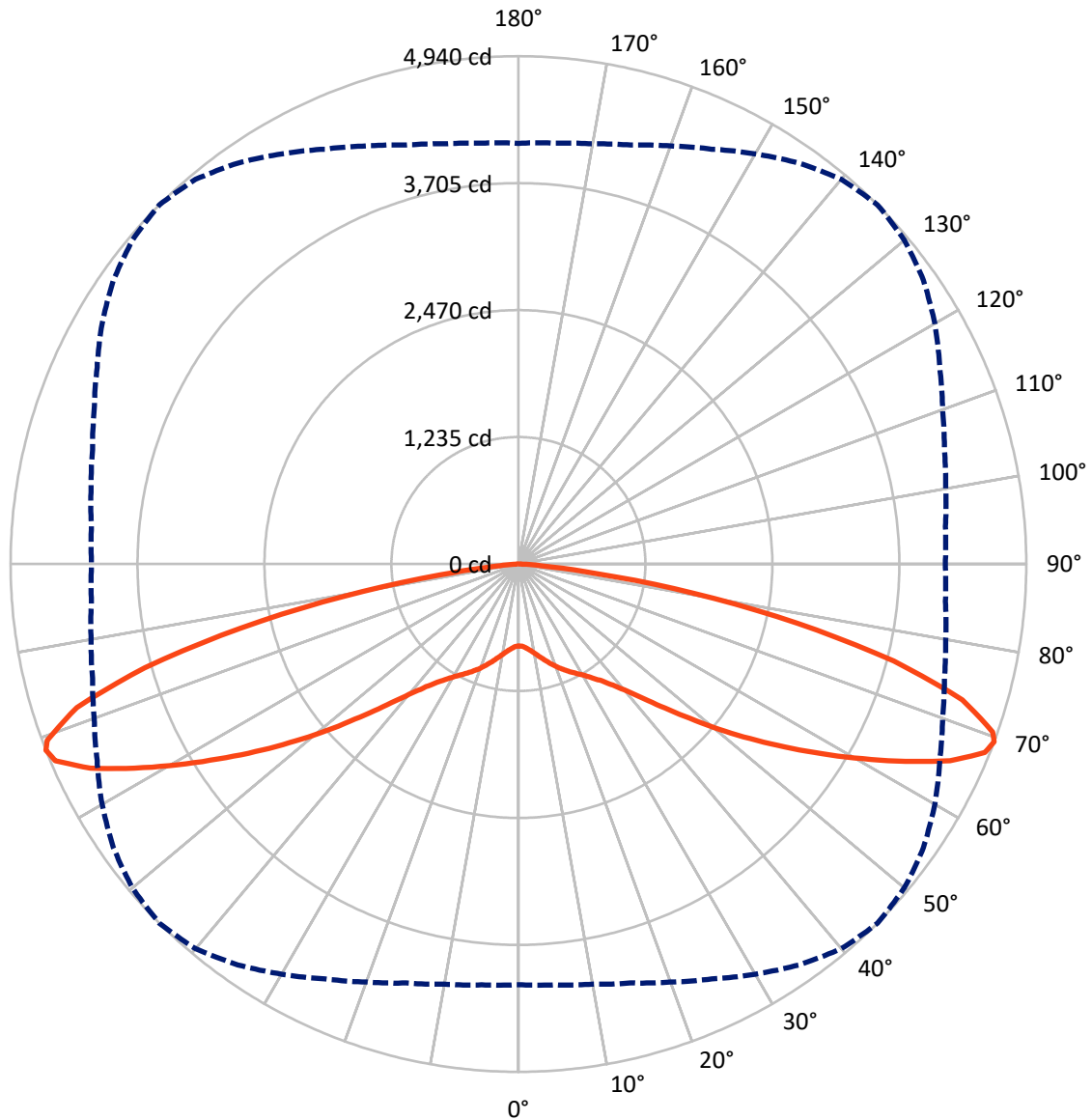
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P143974
CATALOG NUMBER: LDRL-5WQ-F06-E-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P143974

CATALOG NUMBER: LDRL-5WQ-F06-E-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6934.2	0.0	6934.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6934.2	0.0	6934.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	13868.5	0.0	13868.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.4	0.6
10°-20°	277.1	2.0
20°-30°	534.2	3.9
30°-40°	875.4	6.3
40°-50°	1522.2	11.0
50°-60°	2703.9	19.5
60°-70°	4198.0	30.3
70°-80°	3344.7	24.1
80°-90°	332.6	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°	13868.5	100.0
0°-180°	13868.5	100.0



REPORT NUMBER: P143974

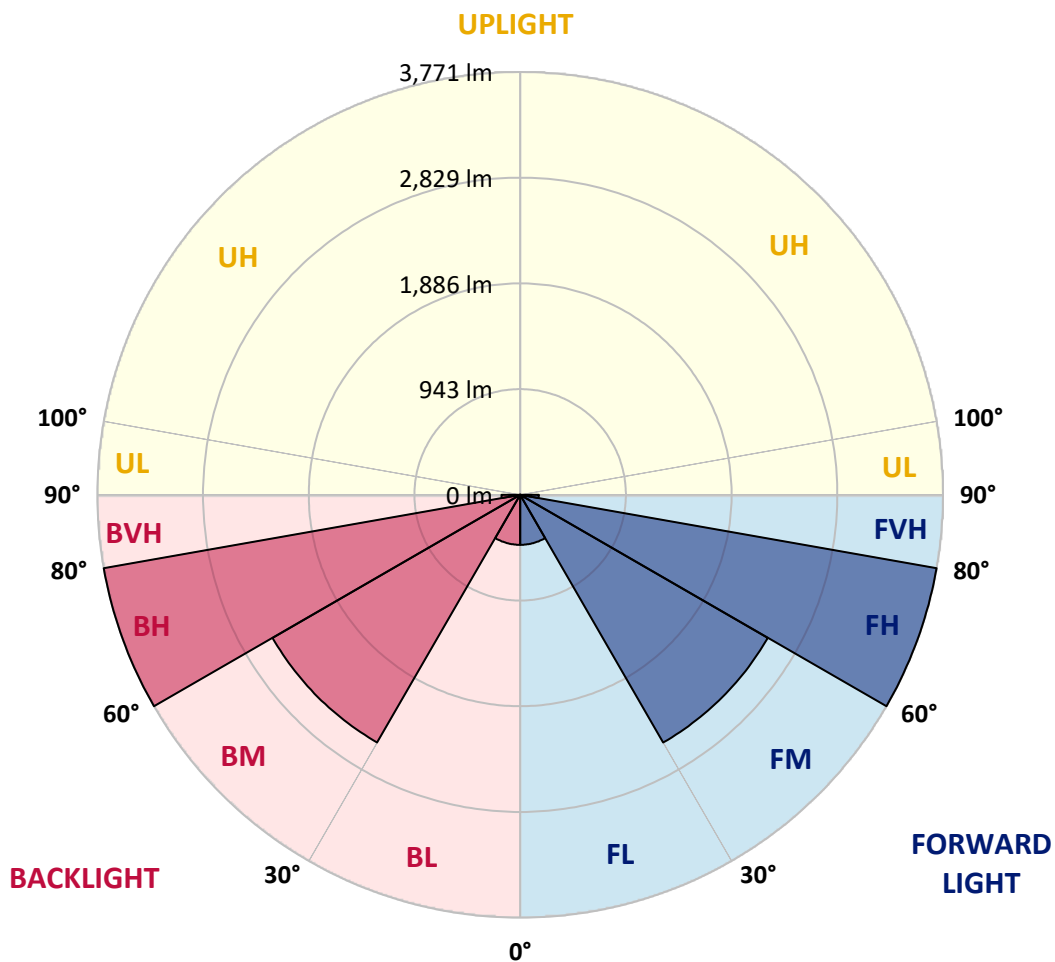
CATALOG NUMBER: LDRL-5WQ-F06-E-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	445.9	3.2			
FM	(30°-60°)	2550.7	18.4			
FH	(60°-80°)	3771.3	27.2			G2/5000
FVH	(80°-90°)	166.3	1.2			G2/225
BL	(0°-30°)	445.9	3.2	B1/500		
BM	(30°-60°)	2550.7	18.4	B3/5000		
BH	(60°-80°)	3771.3	27.2	B4/5000		G2/5000
BVH	(80°-90°)	166.3	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





REPORT NUMBER: P143974

CATALOG NUMBER: LDRL-5WQ-F06-E-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	797.1	797.1	797.1	797.1	797.1	797.1	797.1	797.1	797.1	797.1	797.1
2.5°	803.5	803.5	803.5	802.6	802.6	801.6	802.6	801.6	801.6	801.6	801.6
5°	824.3	822.5	822.5	821.6	823.4	823.4	821.6	822.5	821.6	822.5	822.5
7.5°	850.5	850.5	850.5	849.6	851.4	850.5	849.6	850.5	850.5	849.6	849.6
10°	883.1	884.0	883.1	883.1	885.8	884.9	885.8	885.8	886.7	885.8	885.8
12.5°	921.1	921.1	922.0	922.9	923.8	924.7	927.4	926.5	928.3	926.5	926.5
15°	965.4	967.2	965.4	965.4	968.1	969.9	970.8	970.8	972.7	971.7	969.9
17.5°	1012.5	1013.4	1012.5	1011.6	1014.3	1017.0	1017.9	1017.9	1020.6	1018.8	1018.8
20°	1060.4	1061.3	1059.5	1058.6	1062.2	1062.2	1064.0	1064.9	1067.7	1068.6	1065.8
22.5°	1104.8	1105.7	1104.8	1103.8	1107.5	1107.5	1110.2	1111.1	1114.7	1113.8	1113.8
25°	1148.2	1148.2	1147.3	1147.3	1150.9	1151.8	1154.5	1156.3	1159.9	1159.9	1159.9
27.5°	1188.0	1188.9	1187.1	1186.2	1193.4	1196.1	1197.9	1201.6	1204.3	1206.1	1205.2
30°	1233.2	1233.2	1232.3	1235.0	1239.6	1243.2	1246.8	1252.2	1257.7	1255.9	1255.9
32.5°	1286.6	1288.4	1287.5	1291.1	1296.6	1302.0	1306.5	1312.9	1315.6	1320.1	1316.5
35°	1358.1	1361.7	1359.9	1363.5	1368.0	1371.7	1381.6	1388.0	1392.5	1395.2	1393.4
37.5°	1447.7	1445.9	1449.5	1450.4	1459.4	1464.0	1475.7	1484.8	1492.0	1494.7	1492.9
40°	1559.0	1556.2	1560.8	1565.3	1577.1	1581.6	1595.1	1608.7	1618.7	1622.3	1620.5
42.5°	1692.0	1695.6	1702.8	1709.2	1725.4	1738.1	1753.5	1773.4	1784.3	1788.8	1782.4
45°	1866.6	1860.3	1873.8	1890.1	1899.2	1927.2	1952.5	1973.4	1991.4	1998.7	1991.4
47.5°	2065.6	2064.7	2081.0	2100.9	2124.5	2150.7	2180.5	2207.7	2239.4	2241.2	2232.1
50°	2285.5	2303.6	2312.6	2332.6	2376.0	2408.6	2446.6	2487.3	2516.2	2525.3	2509.0
52.5°	2550.6	2564.2	2569.6	2603.1	2642.9	2682.7	2736.1	2785.0	2818.4	2822.0	2813.9
55°	2838.3	2849.2	2859.1	2899.9	2943.3	2978.6	3046.4	3094.4	3127.9	3140.5	3135.1
57.5°	3136.0	3146.0	3158.6	3203.0	3247.3	3297.1	3361.3	3417.4	3456.3	3479.8	3473.5
60°	3466.3	3466.3	3495.2	3539.5	3575.7	3634.6	3701.5	3766.6	3809.2	3846.3	3836.3
62.5°	3813.7	3823.7	3851.7	3887.9	3925.9	3980.2	4056.2	4134.0	4199.1	4227.2	4226.3
65°	4077.0	4095.1	4132.2	4173.8	4237.1	4301.4	4397.3	4494.1	4572.8	4613.5	4613.5
67.5°	4153.9	4165.7	4211.8	4275.1	4366.5	4468.8	4599.1	4733.9	4841.5	4894.9	4861.4
69°	4092.4	4109.6	4150.3	4219.0	4327.6	4452.5	4607.2	4760.1	4885.0	4940.2	4901.3
70°	4020.9	4039.9	4080.6	4148.5	4260.7	4393.7	4548.4	4713.1	4847.0	4894.0	4849.7
72.5°	3729.6	3753.1	3782.0	3840.8	3942.2	4067.0	4206.4	4351.1	4479.6	4516.7	4461.5
75°	3232.8	3237.3	3251.8	3295.3	3331.4	3420.1	3538.6	3653.6	3750.4	3772.1	3713.3
77.5°	2288.2	2263.8	2239.4	2276.5	2305.4	2419.4	2547.9	2642.0	2743.3	2774.1	2714.4
80°	1003.4	994.4	1028.7	1077.6	1205.2	1281.2	1407.0	1541.8	1627.7	1728.2	1620.5
82.5°	198.1	209.0	241.6	298.6	368.3	463.3	545.6	638.8	722.9	760.9	722.0
85°	80.5	87.8	99.5	111.3	119.4	133.9	157.4	195.4	215.3	218.1	207.2
87.5°	33.5	38.9	52.5	62.4	63.3	60.6	62.4	64.2	52.5	42.5	53.4
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: P143974

CATALOG NUMBER: LDRL-5WQ-F06-E-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	797.1	797.1	797.1	797.1	797.1	797.1	797.1	797.1
2.5°	801.6	802.6	801.6	802.6	801.6	801.6	802.6	801.6
5°	821.6	822.5	821.6	820.6	819.7	820.6	820.6	820.6
7.5°	849.6	848.7	847.8	847.8	846.9	846.0	847.8	847.8
10°	884.0	883.1	881.3	881.3	880.4	880.4	880.4	880.4
12.5°	925.6	922.9	922.0	919.3	918.4	917.5	917.5	918.4
15°	969.0	966.3	965.4	960.9	960.9	960.0	960.0	960.0
17.5°	1015.2	1012.5	1008.8	1008.8	1006.1	1004.3	1005.2	1003.4
20°	1062.2	1058.6	1056.8	1055.9	1052.3	1052.3	1052.3	1051.4
22.5°	1108.4	1105.7	1102.9	1099.3	1095.7	1094.8	1094.8	1093.9
25°	1155.4	1150.9	1145.5	1141.8	1138.2	1135.5	1135.5	1135.5
27.5°	1202.5	1197.0	1188.9	1184.4	1178.9	1176.2	1176.2	1175.3
30°	1252.2	1245.9	1238.7	1232.3	1225.1	1222.4	1221.5	1219.7
32.5°	1311.9	1305.6	1298.4	1289.3	1282.1	1277.6	1277.6	1274.9
35°	1388.0	1380.7	1375.3	1363.5	1354.5	1347.2	1348.1	1349.9
37.5°	1487.5	1478.4	1473.9	1459.4	1447.7	1440.4	1440.4	1439.5
40°	1614.1	1605.1	1595.1	1581.6	1567.1	1557.1	1554.4	1554.4
42.5°	1775.2	1767.1	1753.5	1734.5	1717.3	1706.4	1697.4	1698.3
45°	1977.0	1967.0	1948.0	1924.5	1903.7	1888.3	1875.6	1875.6
47.5°	2222.2	2201.4	2175.1	2154.3	2119.0	2095.5	2086.5	2084.6
50°	2501.8	2462.8	2430.3	2400.4	2363.3	2338.9	2325.3	2321.7
52.5°	2794.9	2754.2	2713.5	2674.6	2629.3	2604.0	2582.3	2580.5
55°	3113.4	3061.8	3010.2	2972.2	2918.9	2892.6	2870.9	2858.2
57.5°	3438.2	3380.3	3343.2	3288.9	3232.8	3213.8	3193.0	3177.6
60°	3803.7	3740.4	3691.6	3634.6	3598.4	3557.6	3537.7	3526.0
62.5°	4177.4	4118.6	4056.2	4001.9	3951.2	3923.2	3896.0	3882.5
65°	4557.4	4460.6	4386.4	4311.3	4251.6	4201.0	4158.4	4153.0
67.5°	4790.9	4668.7	4544.8	4435.3	4347.5	4276.0	4232.6	4217.2
69°	4809.9	4676.9	4522.2	4391.0	4289.6	4220.9	4169.3	4153.0
70°	4757.4	4623.5	4460.6	4319.5	4214.5	4139.4	4096.9	4069.8
72.5°	4373.8	4256.1	4099.6	3960.3	3865.3	3777.5	3735.0	3724.1
75°	3608.3	3483.4	3339.6	3272.6	3206.6	3151.4	3122.4	3119.7
77.5°	2562.4	2434.8	2325.3	2237.6	2166.1	2130.8	2138.9	2109.1
80°	1466.7	1300.2	1168.1	1090.3	984.4	921.1	849.6	901.2
82.5°	630.6	509.4	388.2	315.8	240.7	190.9	157.4	146.6
85°	176.4	143.9	120.3	110.4	99.5	88.7	75.1	69.7
87.5°	59.7	57.0	50.7	50.7	46.1	38.9	27.1	24.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)