

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: P143622

Luminaire Tested: **LDRL-5MQ-E01-E-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143622
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-E01-E-7060
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (21) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3188.8 lumens
Efficiency: N/A
Efficacy: 129.1 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B2 - U0 - G1

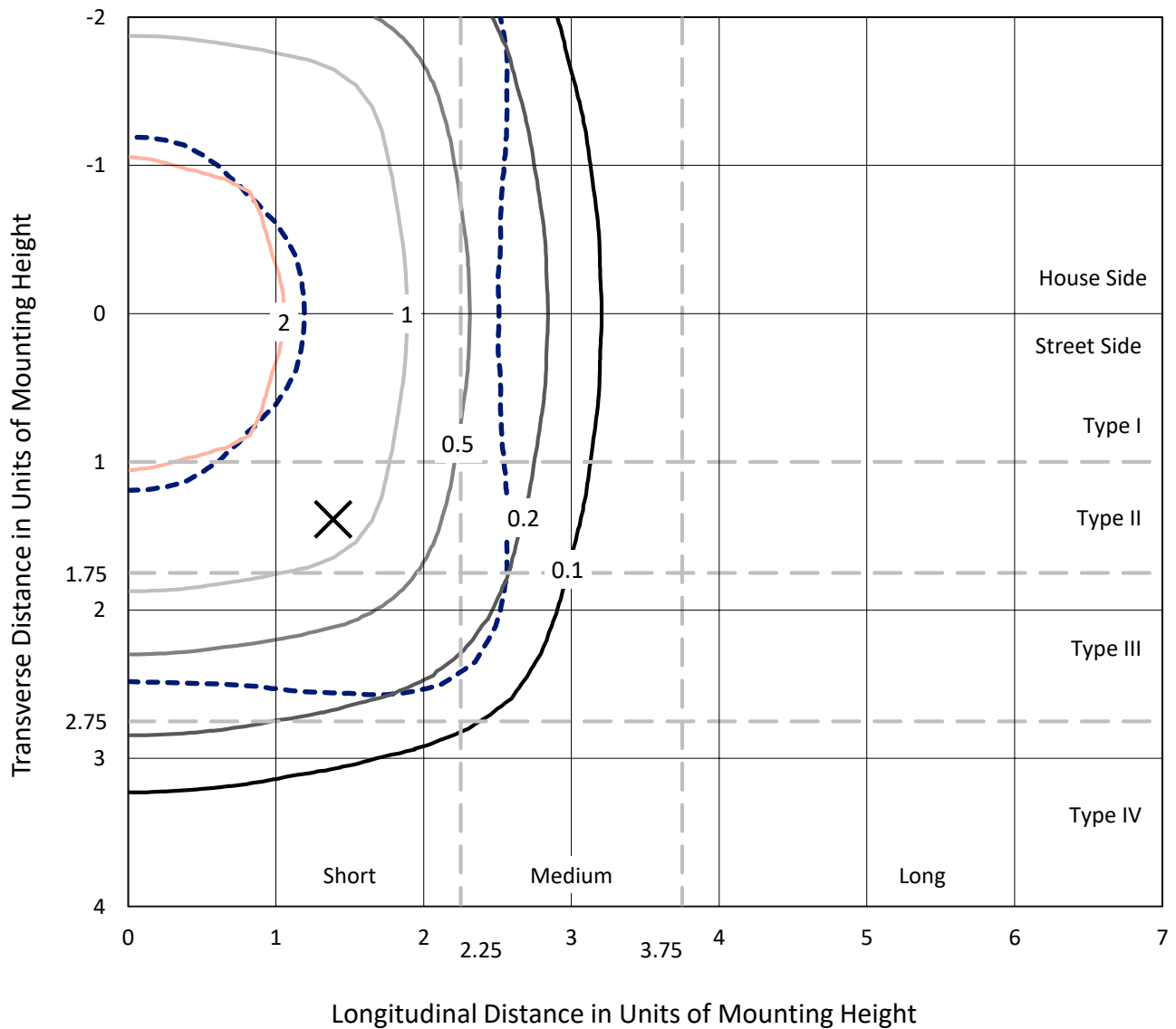
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

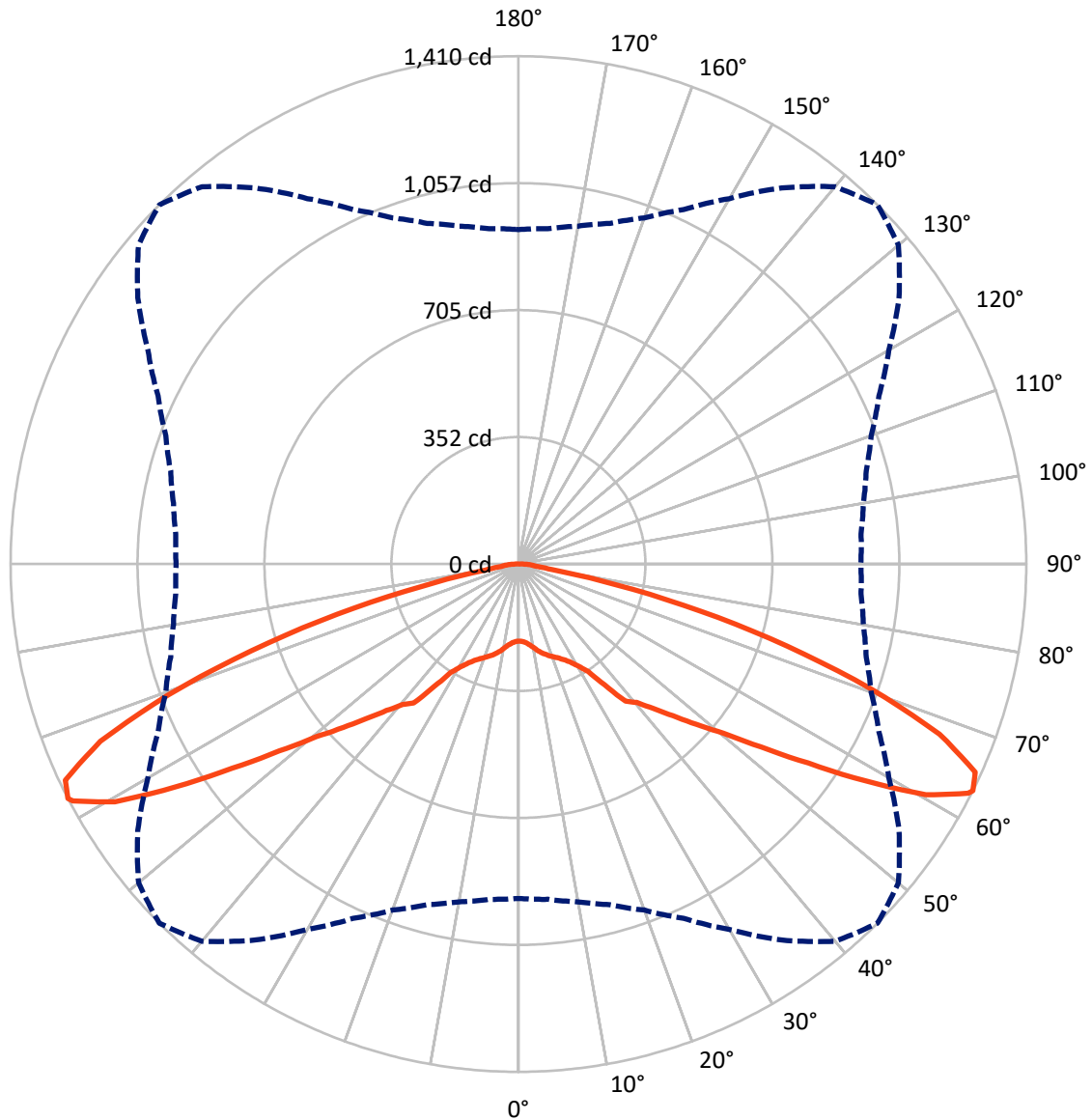
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.4 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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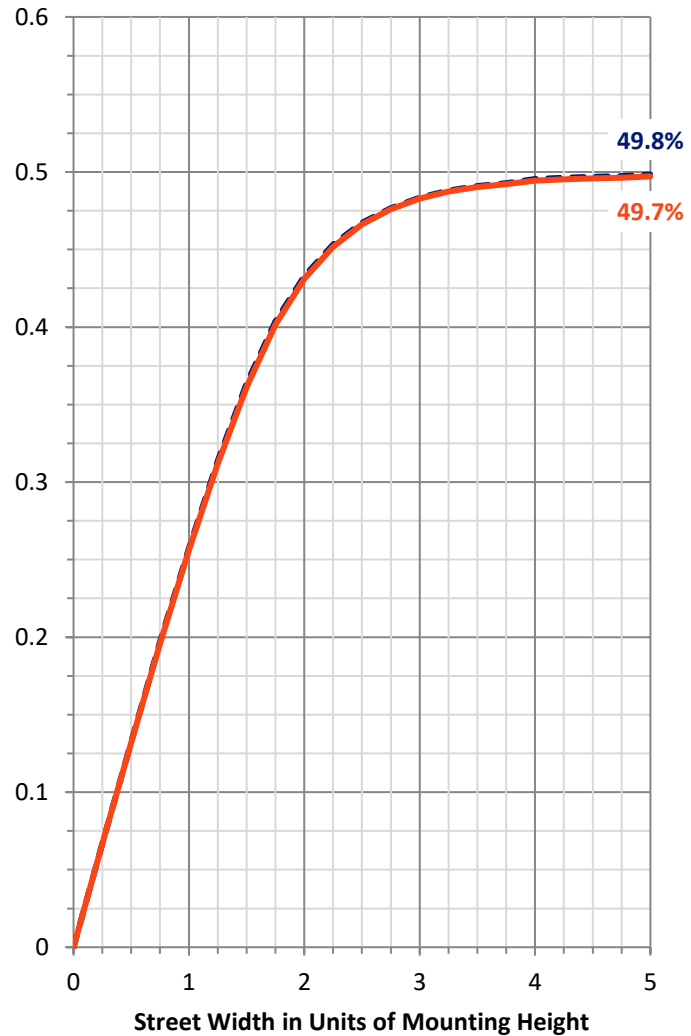
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1594.4	0.0	1594.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1594.4	0.0	1594.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	3188.8	0.0	3188.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.5	0.7
10°-20°	73.6	2.3
20°-30°	140.6	4.4
30°-40°	267.9	8.4
40°-50°	461.3	14.5
50°-60°	824.3	25.8
60°-70°	1004.0	31.5
70°-80°	357.6	11.2
80°-90°	37.9	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°	3188.8	100.0
0°-180°	3188.8	100.0



--- HS — SS

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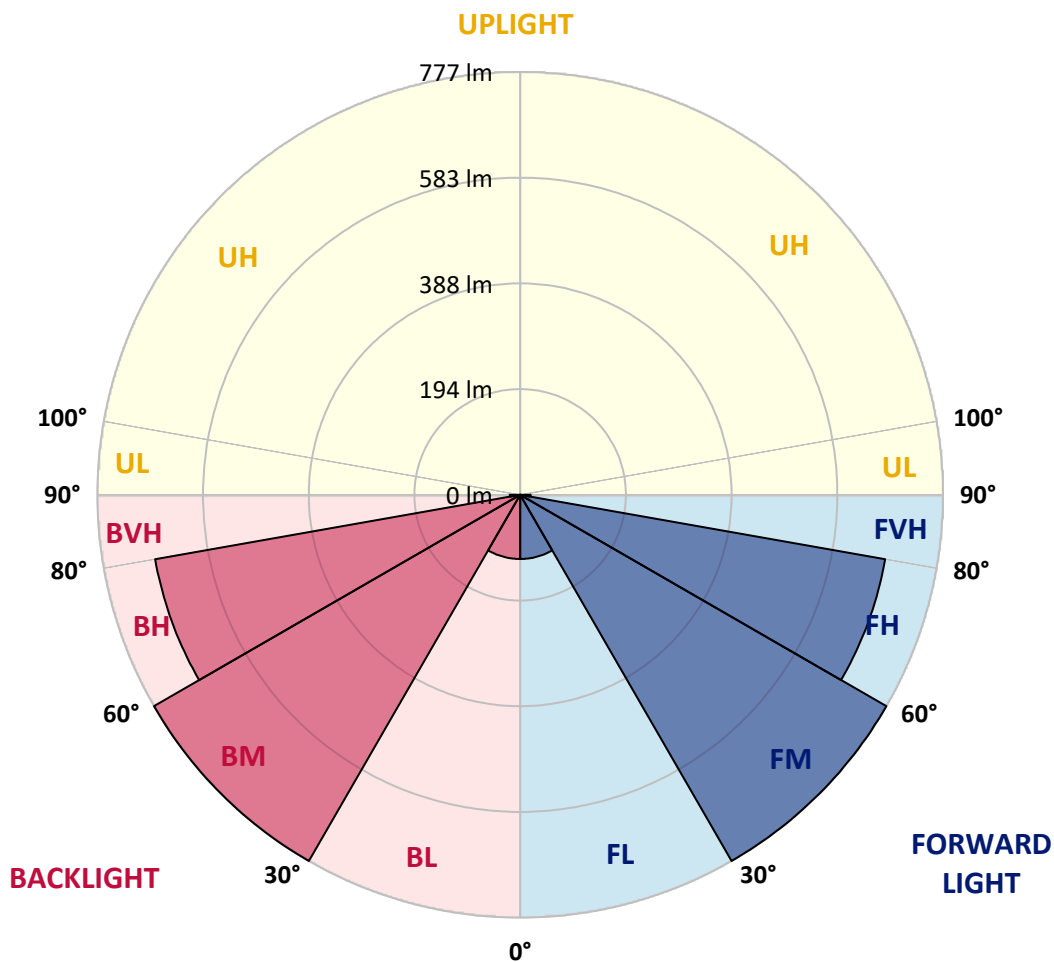
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	117.9	3.7			
FM (30°-60°)	776.7	24.4			
FH (60°-80°)	680.8	21.4			G1/1800
FVH (80°-90°)	19.0	0.6			G1/100
BL (0°-30°)	117.9	3.7	B1/500		
BM (30°-60°)	776.7	24.4	B1/1000		
BH (60°-80°)	680.8	21.4	B2/1000		G1/1800
BVH (80°-90°)	19.0	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0
2.5°	215.7	215.5	215.7	215.3	215.3	215.1	215.1	215.1	214.7	215.1	214.7
5°	220.2	220.0	220.2	219.8	219.8	219.4	219.4	219.4	219.0	219.4	219.2
7.5°	228.0	228.4	228.0	227.6	227.6	227.2	227.0	227.0	226.8	226.6	227.0
10°	238.9	239.3	238.7	238.3	238.1	237.9	237.4	237.2	237.2	236.4	236.6
12.5°	250.4	250.4	249.8	249.5	249.5	249.1	248.3	248.1	248.1	247.7	247.3
15°	260.6	260.6	260.2	259.4	259.6	259.0	258.4	258.0	258.0	257.6	257.1
17.5°	270.1	270.1	269.5	268.6	268.2	268.0	267.2	266.8	266.8	266.4	266.0
20°	279.5	279.9	278.9	278.1	277.3	276.4	275.6	275.2	274.6	274.8	274.6
22.5°	290.8	291.0	289.4	288.3	286.7	285.7	284.4	284.0	283.2	283.2	283.6
25°	305.2	305.0	303.1	301.3	299.4	297.4	295.5	295.1	294.3	294.1	294.3
27.5°	324.0	323.8	321.6	319.1	316.7	313.6	311.3	310.1	309.5	308.7	309.1
30°	347.2	347.6	345.0	342.1	339.0	335.3	332.5	330.8	329.6	328.8	329.2
32.5°	394.4	394.0	389.9	383.8	377.2	368.6	361.6	358.7	356.5	355.6	356.3
35°	441.8	441.4	439.8	437.9	436.3	430.8	425.6	419.7	414.8	411.7	412.5
37.5°	464.2	464.2	463.0	462.6	462.6	465.9	470.0	477.3	483.1	483.5	481.7
40°	499.1	499.1	497.0	496.0	495.4	496.4	499.1	501.8	504.6	505.3	503.2
42.5°	540.1	538.3	536.9	534.8	534.6	535.6	538.5	541.8	544.7	547.1	542.8
45°	584.5	582.8	581.4	580.2	581.0	583.6	587.5	593.3	597.4	601.1	597.6
47.5°	633.9	630.4	631.9	630.6	632.7	638.0	645.0	653.6	657.9	664.5	659.0
50°	695.5	696.3	695.5	695.5	698.0	704.9	715.2	726.9	734.3	738.0	734.7
52.5°	787.0	784.6	779.0	780.7	783.9	795.0	808.4	824.8	834.2	843.0	832.8
55°	887.2	887.6	886.8	889.0	895.4	906.7	923.5	948.3	960.2	975.6	963.3
57.5°	970.1	973.0	977.9	984.7	998.4	1017.3	1050.3	1088.3	1119.9	1136.5	1117.2
60°	997.0	999.8	1011.7	1030.6	1056.5	1095.1	1148.6	1213.7	1270.5	1300.1	1274.8
62.5°	945.2	950.6	968.2	994.3	1037.0	1097.3	1176.9	1273.2	1360.8	1401.2	1370.7
63°	928.4	934.4	952.4	978.9	1022.4	1085.4	1171.4	1274.4	1367.2	1409.9	1376.8
65°	853.7	857.6	876.7	906.9	955.3	1021.0	1116.6	1238.5	1344.2	1393.7	1358.6
67.5°	736.1	741.3	758.7	784.8	831.8	901.3	995.3	1116.8	1220.9	1260.5	1230.5
70°	590.4	596.2	610.5	634.7	671.7	736.1	816.6	930.1	1008.3	1039.2	1007.2
72.5°	415.0	417.4	427.9	453.3	481.0	532.3	596.2	684.4	759.5	779.8	749.1
75°	175.7	175.9	189.6	205.8	240.5	291.6	347.2	423.2	490.7	522.3	483.3
77.5°	56.2	56.8	60.7	66.7	78.2	101.0	142.0	183.7	245.6	275.6	239.1
80°	47.0	47.8	49.5	50.7	51.5	52.7	57.5	64.0	80.7	93.8	75.7
82.5°	40.4	41.9	45.6	47.0	47.8	48.2	48.8	48.6	47.6	47.2	47.4
85°	30.8	34.3	38.4	41.7	42.1	42.3	43.5	43.9	40.6	37.4	40.6
87.5°	13.3	17.2	26.5	29.3	28.7	26.7	28.5	30.2	27.5	20.1	26.9
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°	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0
2.5°	214.9	215.3	215.3	215.3	215.3	215.5	215.7	215.5
5°	219.4	219.8	219.6	219.8	219.8	220.0	220.2	220.0
7.5°	227.2	227.2	227.2	227.6	227.6	228.0	228.0	228.0
10°	236.8	236.6	236.6	237.0	237.4	237.6	238.1	237.9
12.5°	247.3	246.9	247.1	247.5	247.9	248.1	248.5	248.3
15°	256.7	256.5	256.5	257.1	257.3	257.6	258.4	258.4
17.5°	265.8	265.8	265.8	266.6	266.8	267.6	268.2	268.2
20°	274.8	274.8	274.8	275.6	276.2	277.5	278.7	278.5
22.5°	284.0	284.2	284.6	285.5	286.9	288.7	289.8	289.8
25°	295.5	296.3	297.2	298.4	300.4	302.9	304.5	305.2
27.5°	310.3	312.1	314.2	316.0	318.3	321.4	323.6	324.0
30°	330.4	333.1	336.4	338.8	341.7	345.2	347.8	349.3
32.5°	358.9	365.5	369.8	378.6	384.0	389.9	394.8	396.9
35°	417.6	424.2	429.9	435.9	437.1	439.2	441.8	442.5
37.5°	475.7	470.4	465.2	465.0	463.6	464.0	464.8	465.9
40°	500.9	499.3	496.6	497.7	497.9	497.9	499.5	499.7
42.5°	541.6	537.7	534.6	537.1	537.5	537.9	539.5	541.4
45°	593.3	587.3	583.4	582.0	583.4	583.0	585.3	585.7
47.5°	652.4	644.6	635.8	632.9	632.1	630.2	634.1	633.7
50°	724.8	712.3	701.7	697.5	695.5	694.5	695.5	695.5
52.5°	816.6	804.1	789.5	784.8	783.1	785.4	782.1	785.6
55°	942.8	922.5	902.6	896.2	895.2	894.1	894.6	896.0
57.5°	1084.8	1048.7	1022.0	1006.4	996.3	991.4	986.1	985.3
60°	1221.9	1156.2	1105.5	1071.0	1046.6	1028.2	1018.7	1015.4
62.5°	1288.0	1191.9	1113.1	1054.4	1018.1	987.9	971.3	967.0
63°	1289.8	1187.4	1103.9	1041.9	999.6	972.5	954.9	950.4
65°	1255.5	1139.0	1041.1	973.0	928.2	899.9	878.1	873.4
67.5°	1130.8	1017.7	917.5	848.4	800.0	777.2	753.2	752.5
70°	928.0	827.0	742.7	679.1	638.6	616.1	591.7	592.3
72.5°	678.5	588.8	530.7	481.0	438.4	417.0	394.0	396.3
75°	408.4	328.4	276.0	232.9	189.0	162.7	145.1	135.0
77.5°	174.6	119.4	85.8	68.1	57.5	53.2	51.1	50.5
80°	60.7	53.8	50.7	49.9	49.3	48.4	47.0	45.6
82.5°	49.3	49.3	47.6	47.4	45.6	44.1	40.4	38.6
85°	43.7	42.9	41.5	40.8	40.4	37.4	32.6	30.2
87.5°	28.9	26.9	25.7	26.3	25.4	22.8	14.0	11.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)