

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: INVUE

Report Number: P140265

Luminaire Tested: **ECM-F01-LED-E1-5MQ**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P140265  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33686)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-F01-LED-E1-5MQ  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (7) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2521 lumens  
Efficiency: N/A  
Efficacy: 97.3 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

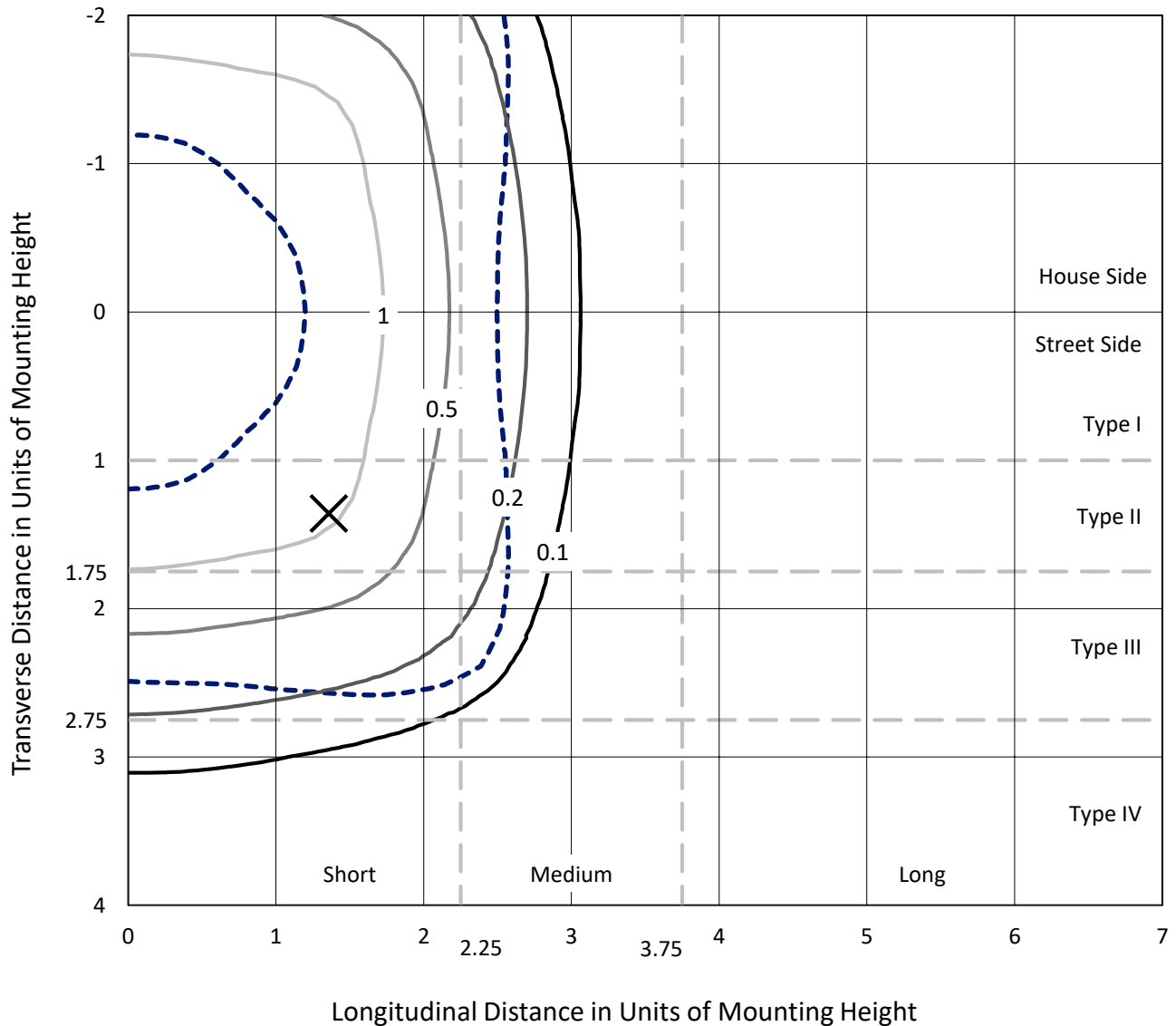
Input Watts (W): 25.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

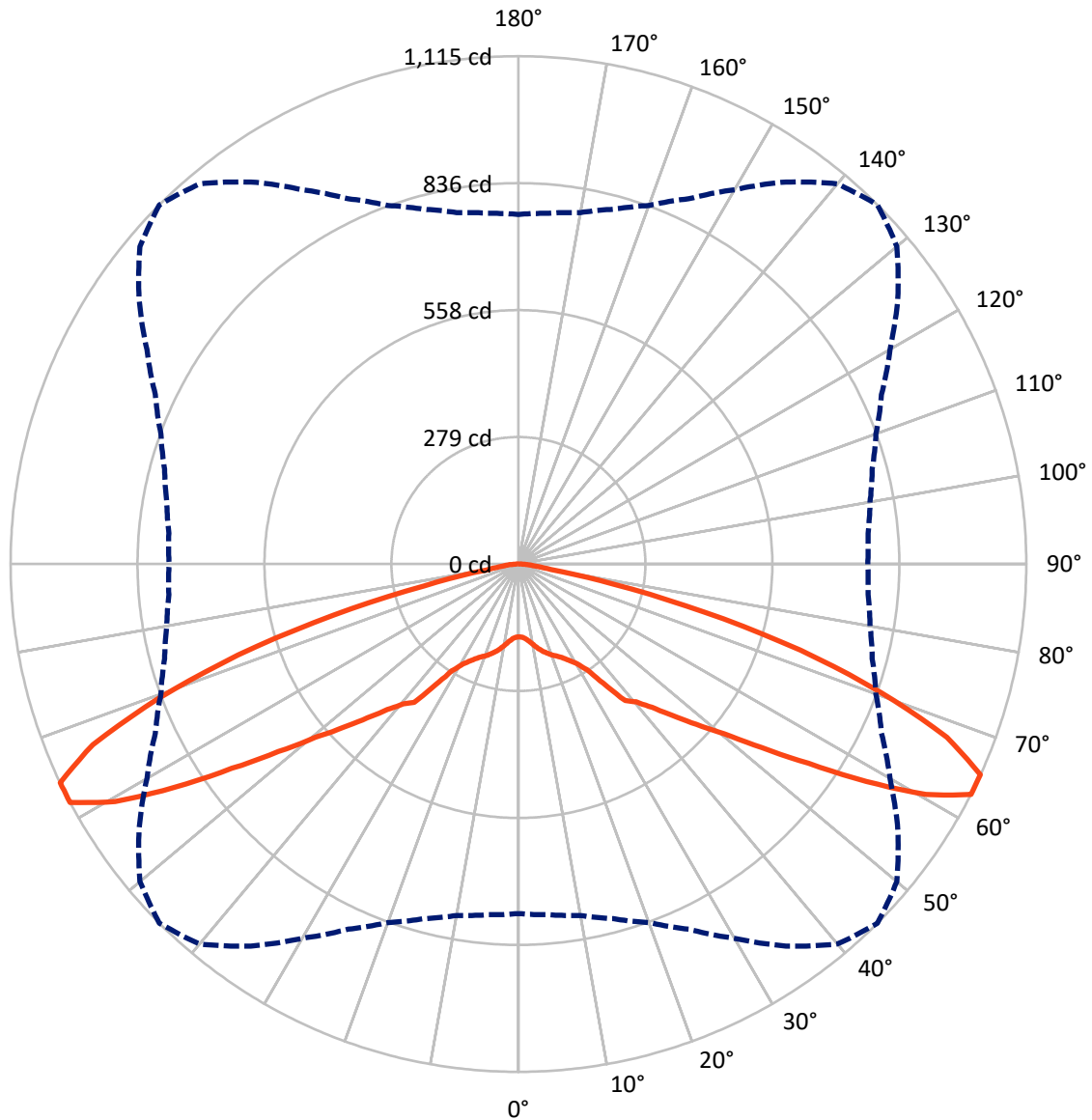
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.8 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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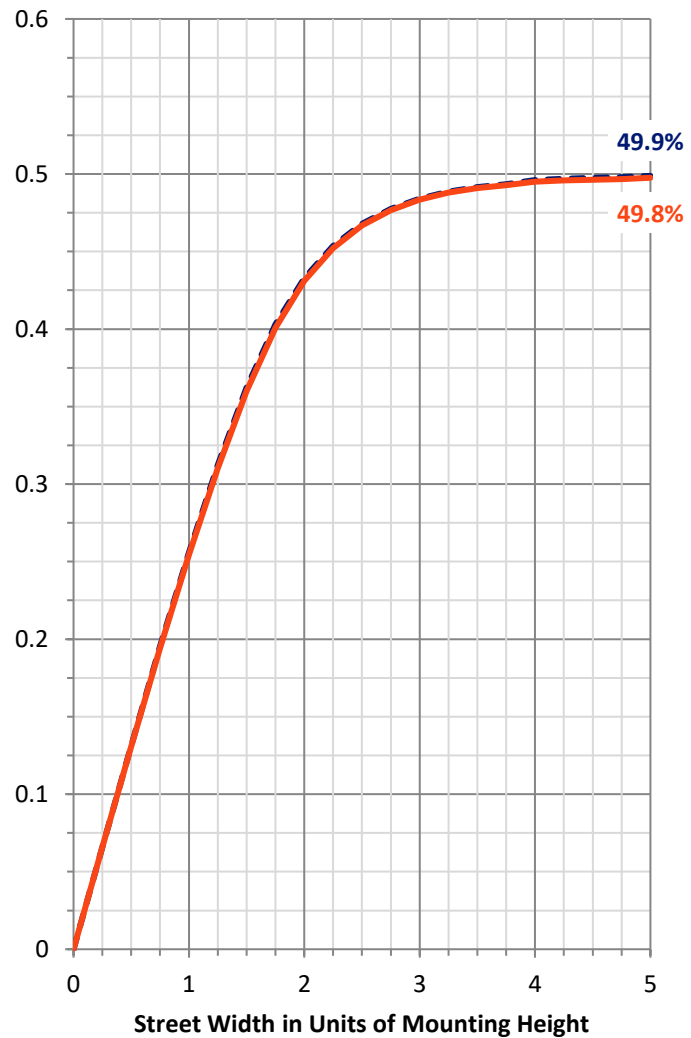
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1260.5	0.0	1260.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	1260.5	0.0	1260.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	2521.0	0.0	2521.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	16.3	0.6
10°-20°	56.6	2.2
20°-30°	108.8	4.3
30°-40°	209.3	8.3
40°-50°	364.3	14.5
50°-60°	654.4	26.0
60°-70°	802.2	31.8
70°-80°	282.9	11.2
80°-90°	26.2	1.0
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°	2521.0	100.0
0°-180°	2521.0	100.0



--- HS    — SS

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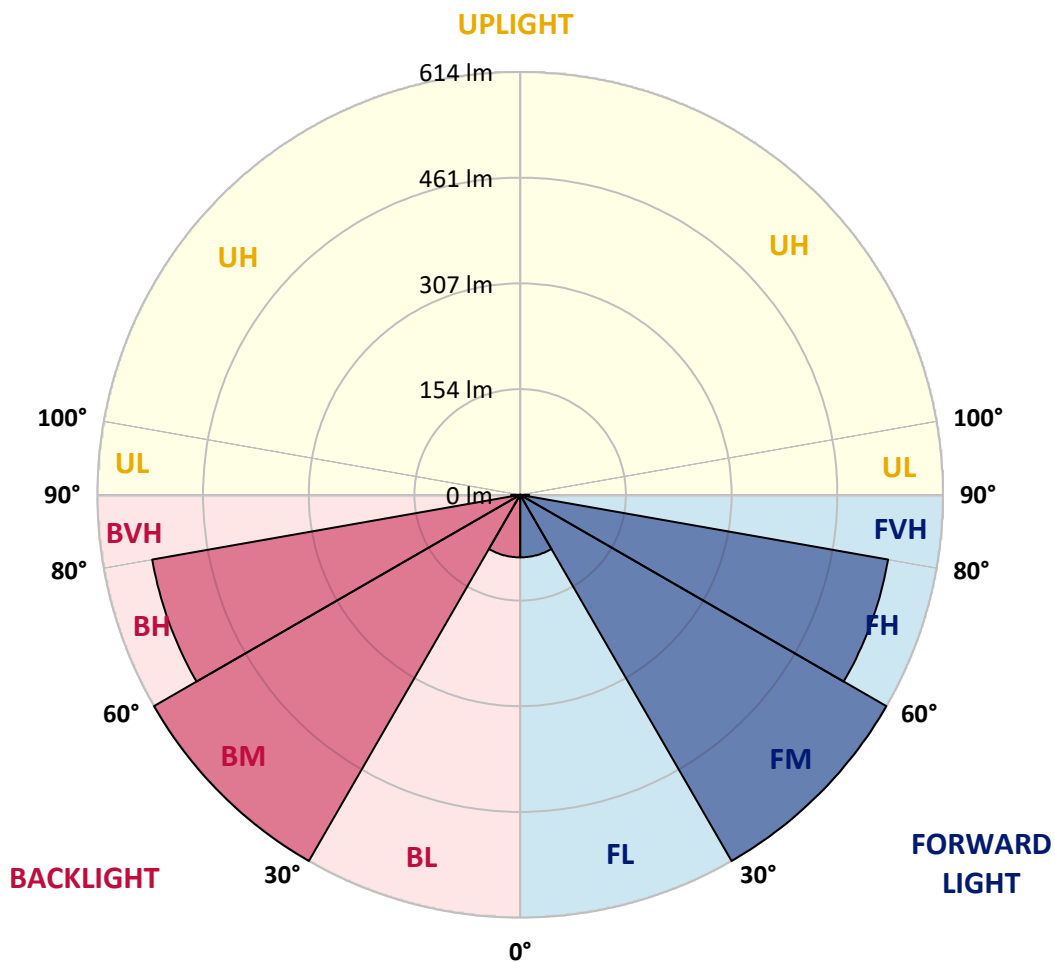
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	90.9	3.6			
FM (30°-60°)	614.0	24.4			
FH (60°-80°)	542.5	21.5			G0/660
FVH (80°-90°)	13.1	0.5			G1/100
BL (0°-30°)	90.9	3.6	B0/110		
BM (30°-60°)	614.0	24.4	B1/1000		
BH (60°-80°)	542.5	21.5	B2/1000		G0/660
BVH (80°-90°)	13.1	0.5			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°	159.9	159.9	159.9	159.9	159.9	159.9	159.9	159.9	159.9	159.9	159.9
2.5°	161.8	161.8	161.5	161.3	161.3	161.3	161.0	161.0	161.3	160.7	160.7
5°	165.9	166.2	165.9	165.7	165.4	165.4	165.1	165.1	165.4	164.8	164.6
7.5°	173.6	173.9	173.4	173.1	172.8	172.5	172.3	172.0	172.3	171.4	171.4
10°	183.5	183.5	183.5	182.4	182.4	181.6	181.3	180.8	181.1	180.2	180.2
12.5°	193.4	193.4	193.2	192.6	192.3	191.8	191.2	191.2	190.7	189.6	189.0
15°	202.3	202.5	202.3	201.4	201.2	200.3	200.3	199.8	199.0	198.4	197.9
17.5°	210.5	210.8	210.0	209.7	208.9	208.3	207.8	207.5	206.9	206.1	205.8
20°	218.5	218.2	217.4	216.3	215.7	215.2	214.6	214.4	214.1	213.5	213.5
22.5°	226.2	226.2	225.4	223.7	222.6	222.1	221.2	220.7	220.1	219.9	220.4
25°	237.8	237.5	235.8	234.2	232.2	230.6	229.5	229.2	228.7	228.7	228.9
27.5°	252.6	252.1	249.6	247.4	245.2	243.0	241.6	240.5	240.2	240.0	240.0
30°	271.3	270.5	268.3	265.5	263.1	260.3	257.6	256.7	255.4	254.3	256.2
32.5°	307.1	307.6	303.2	297.7	292.2	287.0	282.3	278.8	276.6	276.8	276.8
35°	346.4	346.7	344.8	342.6	340.9	337.9	332.7	328.3	325.0	321.4	323.1
37.5°	363.5	363.8	362.1	361.9	363.0	364.9	370.1	374.0	379.7	380.6	378.9
40°	393.5	392.1	389.9	389.4	388.5	391.3	393.5	395.4	396.3	397.9	396.3
42.5°	424.9	424.3	422.7	420.7	420.7	421.3	424.9	427.9	429.8	430.1	429.8
45°	460.1	459.3	457.9	457.6	458.4	460.9	463.4	467.2	473.3	473.6	473.3
47.5°	498.9	499.4	497.2	498.1	499.4	503.6	510.4	516.8	523.4	525.9	522.8
50°	552.0	550.1	550.1	549.2	552.8	558.9	567.1	574.6	583.9	586.1	581.4
52.5°	624.1	620.0	620.8	618.6	620.5	626.0	639.5	651.1	662.9	668.7	659.6
55°	710.8	703.9	704.7	706.9	708.6	717.9	735.0	748.2	770.5	772.4	762.0
57.5°	781.8	779.8	780.9	786.2	796.6	812.9	834.3	866.3	893.8	900.4	889.1
60°	807.6	809.0	816.7	830.5	850.3	879.2	921.0	970.8	1014.6	1027.8	1010.7
62.5°	767.5	773.0	783.4	806.3	837.6	884.7	948.8	1023.9	1089.4	1115.0	1084.5
65°	689.0	692.6	709.7	729.2	769.7	823.6	902.3	1000.0	1080.6	1114.5	1080.3
67.5°	586.1	593.0	607.9	632.1	667.0	721.8	804.3	904.2	985.1	1014.8	984.9
70°	470.5	473.6	482.9	501.9	538.2	586.7	657.4	746.8	825.5	844.2	820.3
72.5°	326.4	332.4	340.4	357.7	380.6	421.6	479.9	545.7	609.0	647.8	612.5
75°	140.6	132.6	150.2	167.6	195.6	233.6	279.3	333.2	396.0	421.8	387.2
77.5°	42.1	41.8	44.6	49.5	59.4	78.7	110.3	146.7	195.1	211.9	181.9
80°	34.4	35.5	36.6	37.7	38.8	40.2	42.7	49.8	61.1	72.1	58.6
82.5°	29.2	30.5	33.6	35.2	36.0	36.3	36.3	36.0	34.7	34.1	33.8
85°	22.0	24.2	28.3	30.8	30.8	30.8	30.8	30.0	28.1	24.8	27.5
87.5°	7.4	9.9	16.5	17.6	18.2	16.8	17.6	17.9	14.9	11.3	14.3
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°	159.9	159.9	159.9	159.9	159.9	159.9	159.9	159.9
2.5°	160.7	160.7	160.7	161.0	160.7	160.7	160.7	160.7
5°	164.8	164.6	164.8	164.6	164.8	164.8	164.6	164.8
7.5°	171.2	171.2	171.4	171.4	171.2	171.2	171.2	171.2
10°	179.7	179.1	179.4	179.4	179.4	179.1	179.1	178.9
12.5°	188.5	187.9	187.9	187.9	187.9	187.7	187.9	187.9
15°	196.8	196.2	195.6	195.6	195.9	196.2	196.2	195.9
17.5°	204.7	204.2	203.4	203.4	203.1	203.6	204.2	203.9
20°	212.7	212.4	211.1	211.1	211.1	211.6	211.9	212.7
22.5°	220.7	220.4	219.3	219.0	219.3	220.4	221.2	221.2
25°	229.2	229.8	229.5	229.5	230.0	231.7	232.5	233.6
27.5°	241.3	242.4	242.7	243.8	244.1	246.0	247.4	249.0
30°	257.0	258.9	260.0	262.0	263.3	264.4	266.4	267.7
32.5°	278.8	283.4	288.9	295.3	298.0	303.0	305.2	305.7
35°	328.8	333.8	338.5	341.2	340.1	341.5	341.5	342.6
37.5°	374.0	369.0	364.9	364.1	361.9	361.0	361.3	362.1
40°	394.9	392.4	390.7	391.6	390.5	389.6	390.2	390.5
42.5°	428.7	424.9	423.5	423.2	422.7	423.2	424.6	424.0
45°	468.3	463.4	461.5	461.2	460.4	460.1	460.6	461.7
47.5°	516.0	509.9	503.8	501.9	501.9	500.3	501.4	499.7
50°	574.3	564.4	558.1	554.5	552.3	549.8	552.0	548.4
52.5°	651.1	637.0	630.2	625.5	619.1	619.4	620.0	618.6
55°	747.9	732.5	719.0	710.0	706.1	703.9	703.3	707.8
57.5°	859.4	832.1	810.7	794.7	788.7	780.4	776.5	776.5
60°	965.3	915.8	873.1	846.4	826.6	812.6	803.2	800.5
62.5°	1017.0	941.9	879.5	835.4	804.1	784.0	770.5	766.9
65°	994.8	899.3	825.8	776.3	739.9	714.1	698.4	694.0
67.5°	905.1	805.2	727.8	678.0	639.0	610.9	599.1	594.1
70°	751.5	659.9	592.7	544.0	503.3	479.6	463.4	456.8
72.5°	540.2	470.5	408.9	367.1	330.5	318.1	296.1	293.9
75°	319.2	258.7	207.8	175.8	143.1	125.2	115.0	104.0
77.5°	129.9	92.7	69.6	52.6	45.1	41.0	39.1	38.5
80°	44.3	39.6	37.4	36.6	35.5	34.9	33.6	32.5
82.5°	34.9	34.7	33.6	33.3	32.2	30.5	27.8	26.1
85°	29.2	28.6	27.2	27.0	26.1	23.9	20.9	19.0
87.5°	16.5	15.1	13.8	14.0	13.2	11.6	8.5	6.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)