

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: P676754

Luminaire Tested: **CCW-SA-1E-830-U-T4W-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676754  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1E-830-U-T4W-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1050mA w/  
T4W distribution lens and House Side Shield  
Light Source: (16) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3919.6 lumens  
Efficiency: N/A  
Efficacy: 69.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2

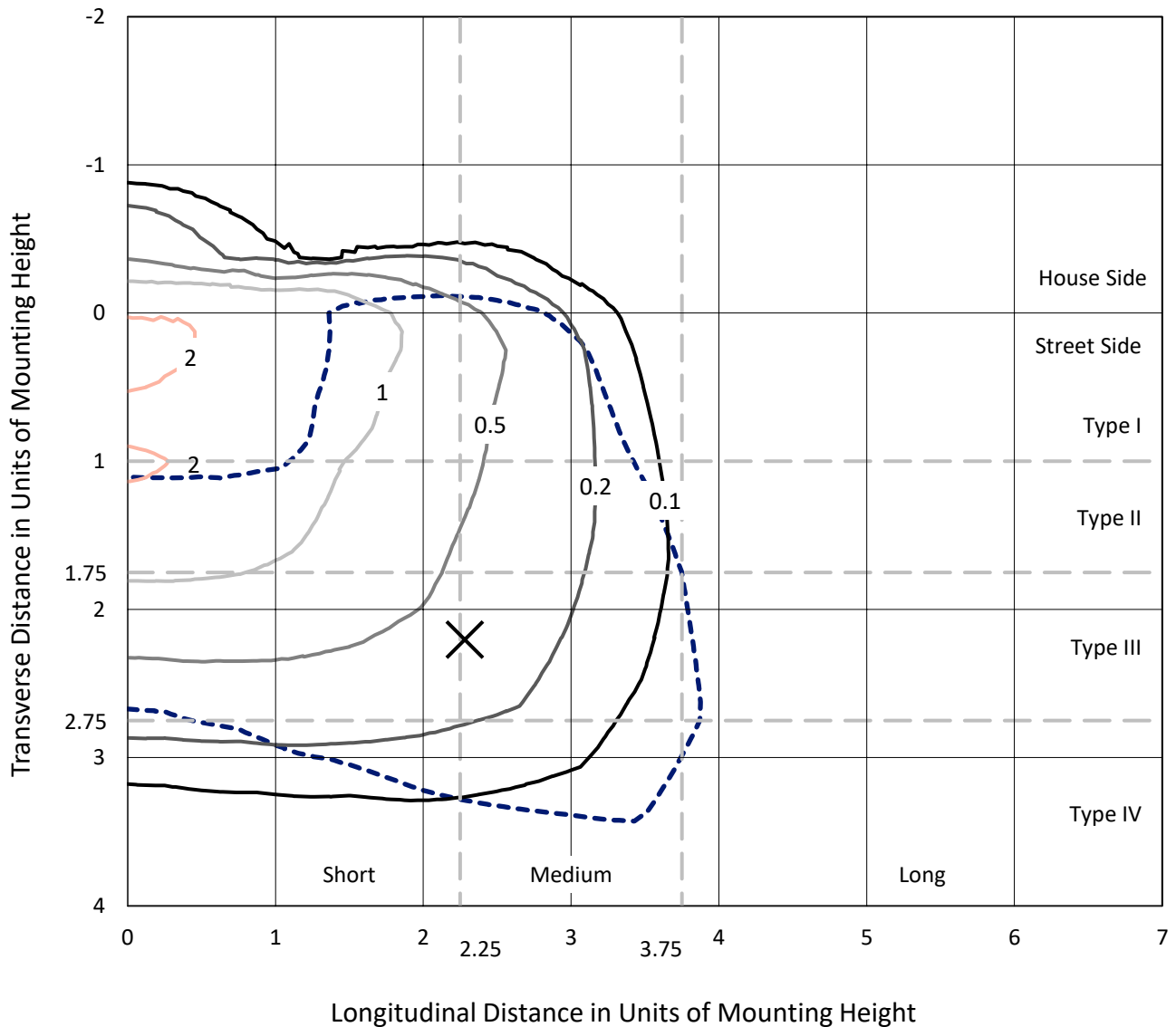
Input Watts (W): 56.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

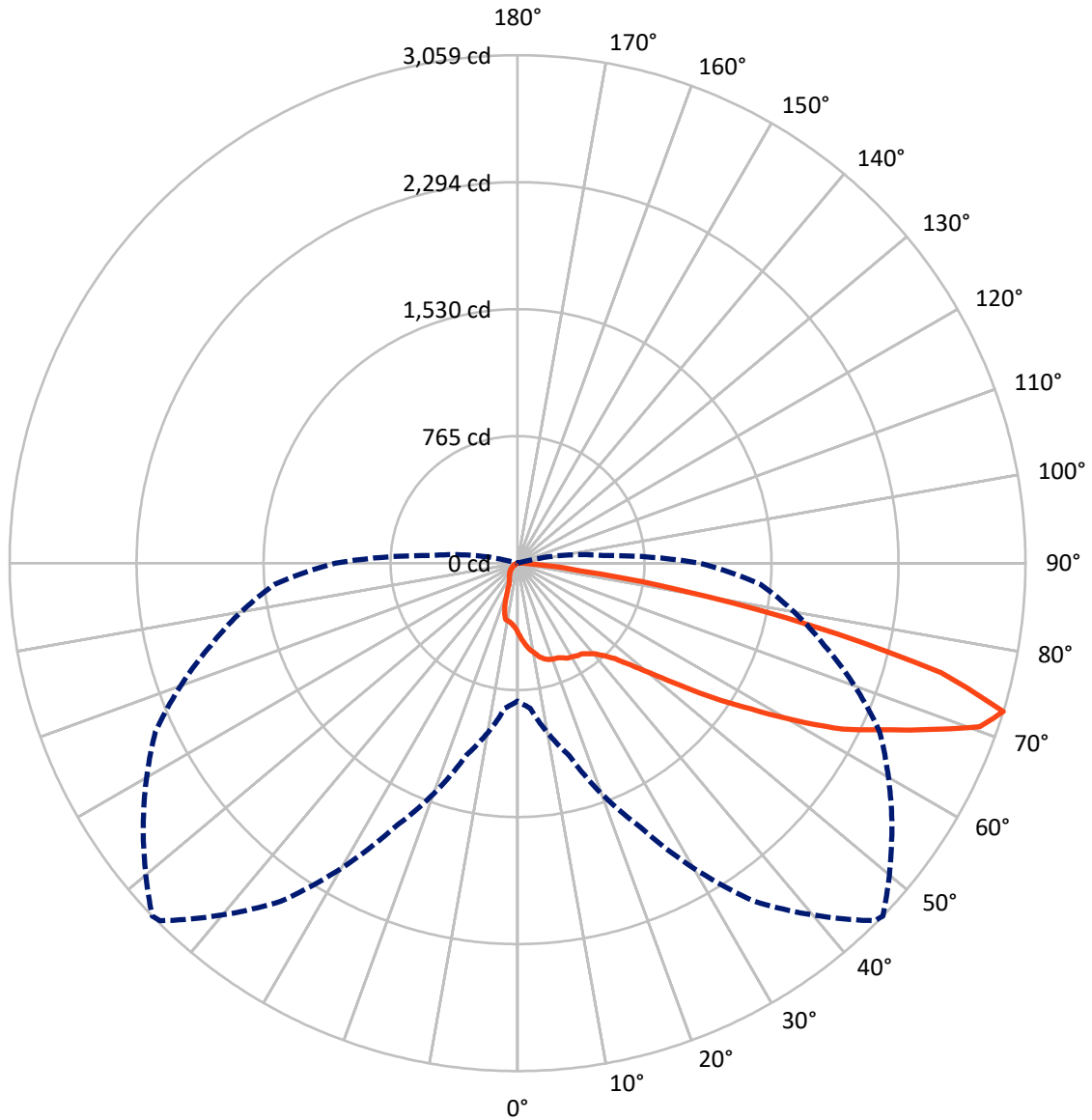
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.7 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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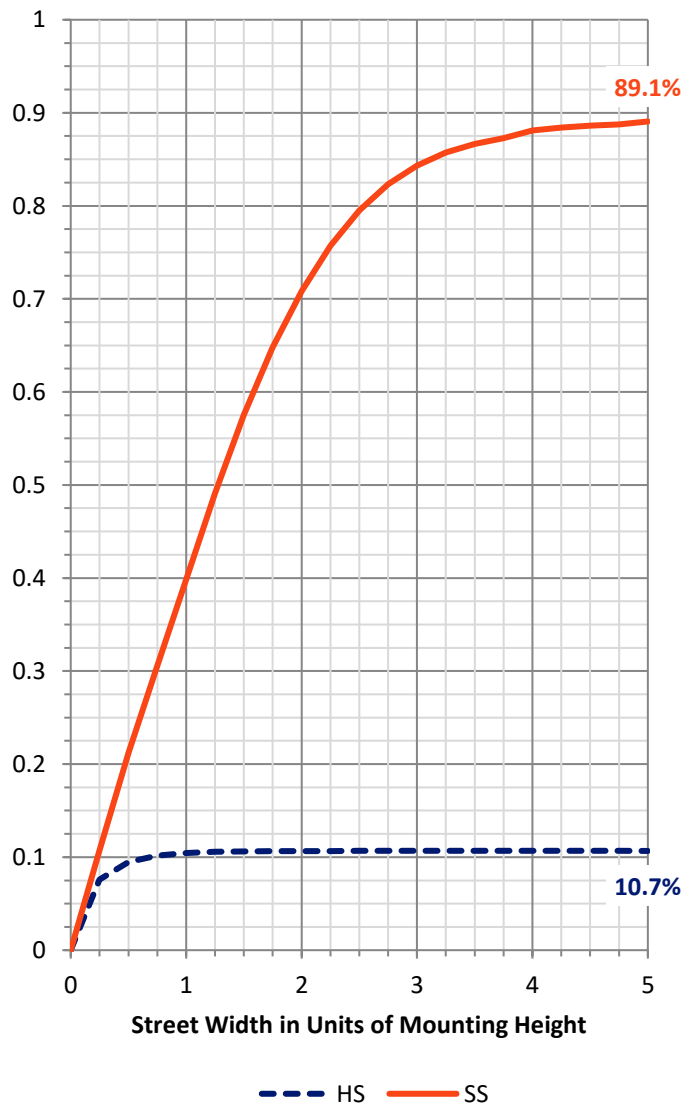
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	422.0	0.0	422.0
	% Fixture	10.8	0.0	10.8
<b>Street Side</b>	Lumens	3497.6	0.0	3497.6
	% Fixture	89.2	0.0	89.2
<b>Total</b>	Lumens	3919.6	0.0	3919.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.9	1.1
10°-20°	126.6	3.2
20°-30°	198.2	5.1
30°-40°	277.5	7.1
40°-50°	457.6	11.7
50°-60°	822.5	21.0
60°-70°	1192.2	30.4
70°-80°	744.0	19.0
80°-90°	59.0	1.5
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°	3919.6	100.0
0°-180°	3919.6	100.0



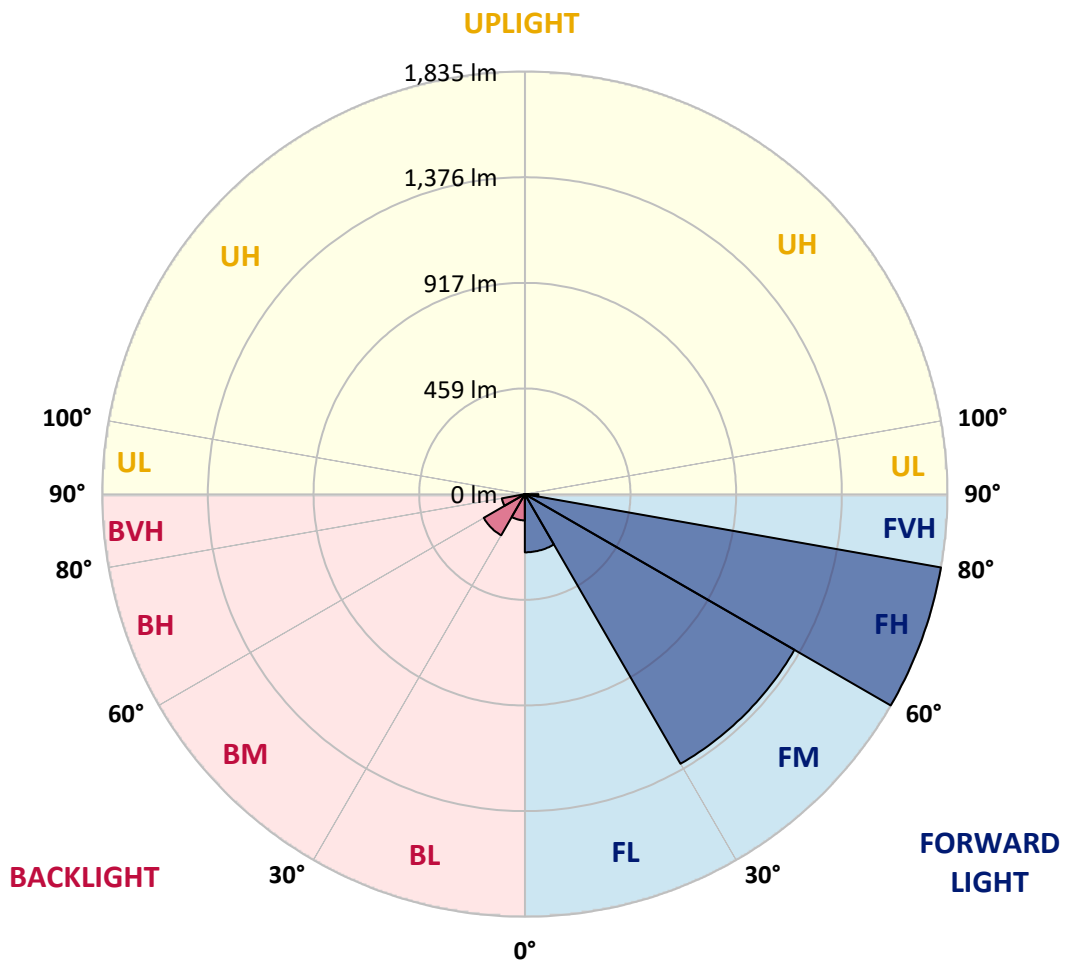
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	252.7	6.4			
FM (30°-60°)	1351.6	34.5			
FH (60°-80°)	1834.8	46.8			G2/5000
FVH (80°-90°)	58.7	1.5			G1/100
BL (0°-30°)	114.0	2.9	B1/500		
BM (30°-60°)	206.2	5.3	B0/220		
BH (60°-80°)	101.5	2.6	B0/110		G0/110
BVH (80°-90°)	0.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	418.9	418.9	418.9	418.9	418.9	418.9	418.9	418.9	418.9	418.9	418.9
2.5°	468.9	466.9	469.9	468.9	456.9	458.9	457.9	449.9	435.9	427.9	422.9
5°	522.9	527.9	523.9	514.9	507.9	493.9	491.9	478.9	456.9	442.9	427.9
7.5°	578.9	578.9	570.9	556.9	541.9	526.9	524.9	502.9	483.9	459.9	438.9
10°	620.9	615.9	609.9	594.9	577.9	557.9	547.9	531.9	510.9	481.9	454.9
12.5°	657.9	649.9	639.9	617.9	597.9	575.9	577.9	551.9	537.9	511.9	471.9
15°	678.9	671.9	662.9	642.9	611.9	601.9	597.9	581.9	556.9	530.9	492.9
17.5°	683.9	678.9	666.9	640.9	623.9	611.9	610.9	591.9	580.9	558.9	516.9
20°	673.9	664.9	655.9	638.9	622.9	618.9	615.9	615.9	601.9	572.9	531.9
22.5°	656.9	646.9	641.9	631.9	618.9	617.9	619.9	617.9	606.9	587.9	547.9
25°	643.9	638.9	630.9	627.9	619.9	634.9	631.9	628.9	625.9	603.9	572.9
27.5°	647.9	646.9	640.9	628.9	622.9	638.9	647.9	648.9	647.9	625.9	595.9
30°	649.9	644.9	638.9	635.9	637.9	653.9	653.9	675.9	666.9	644.9	618.9
32.5°	672.9	669.9	649.9	642.9	643.9	662.9	663.9	685.9	682.9	667.9	638.9
35°	721.8	701.8	672.9	652.9	652.9	677.9	669.9	701.8	709.8	685.9	652.9
37.5°	794.8	779.8	727.8	682.9	665.9	683.9	691.8	709.8	733.8	712.8	680.9
40°	939.8	936.8	862.8	765.8	698.8	714.8	717.8	745.8	761.8	732.8	723.8
42.5°	1151.7	1136.8	1067.8	914.8	758.8	751.8	762.8	780.8	818.8	794.8	772.8
45°	1358.7	1351.7	1282.7	1111.8	867.8	825.8	819.8	851.8	907.8	881.8	864.8
47.5°	1508.7	1494.7	1455.7	1311.7	1027.8	912.8	916.8	948.8	1019.8	999.8	1004.8
50°	1623.6	1616.6	1575.7	1496.7	1229.7	1049.8	1041.8	1073.8	1169.7	1182.7	1196.7
52.5°	1749.6	1762.6	1707.6	1640.6	1468.7	1233.7	1215.7	1226.7	1350.7	1380.7	1419.7
55°	1870.6	1891.6	1836.6	1827.6	1718.6	1437.7	1434.7	1408.7	1568.7	1572.7	1593.7
57.5°	1949.6	1942.6	1938.6	1987.6	1968.6	1671.6	1656.6	1630.6	1775.6	1749.6	1812.6
60°	1955.6	1975.6	2042.6	2163.5	2197.5	1946.6	1924.6	1853.6	1954.6	1892.6	2012.6
62.5°	2000.6	2016.6	2140.5	2307.5	2351.5	2188.5	2203.5	2023.6	2107.5	2058.6	2234.5
65°	1886.6	1936.6	2185.5	2419.5	2553.4	2433.5	2418.5	2242.5	2264.5	2218.5	2453.5
67.5°	1783.6	1802.6	2062.6	2453.5	2713.4	2679.4	2673.4	2436.5	2426.5	2341.5	2515.5
70°	1449.7	1472.7	1729.6	2279.5	2767.4	2966.4	2952.4	2708.4	2536.4	2274.5	2197.5
72.5°	830.8	876.8	1198.7	1755.6	2486.5	3046.3	3059.3	2752.4	2406.5	1912.6	1467.7
75°	271.9	284.9	497.9	994.8	1859.6	2657.4	2634.4	2365.5	1941.6	1262.7	662.9
77.5°	92.0	94.0	147.0	359.9	1030.8	1795.6	1808.6	1690.6	1192.7	524.9	183.0
80°	47.0	50.0	72.0	135.0	423.9	977.8	998.8	963.8	499.9	155.0	44.0
82.5°	22.0	23.0	42.0	75.0	194.0	383.9	383.9	421.9	177.0	87.0	18.0
85°	8.0	8.0	22.0	43.0	82.0	128.0	129.0	130.0	93.0	65.0	8.0
87.5°	3.0	3.0	11.0	18.0	30.0	39.0	39.0	31.0	47.0	43.0	3.0
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	418.9	418.9	418.9	418.9	418.9	418.9	418.9	418.9	418.9	418.9	418.9
2.5°	420.9	414.9	409.9	402.9	393.9	388.9	389.9	383.9	383.9	380.9	379.9
5°	420.9	414.9	401.9	389.9	381.9	371.9	366.9	362.9	362.9	360.9	361.9
7.5°	423.9	414.9	396.9	380.9	367.9	357.9	349.9	348.9	346.9	341.9	345.9
10°	441.9	428.9	398.9	376.9	361.9	350.9	336.9	332.9	326.9	317.9	318.9
12.5°	456.9	439.9	412.9	382.9	363.9	345.9	313.9	278.9	263.9	247.9	248.9
15°	478.9	454.9	417.9	390.9	363.9	305.9	247.9	203.0	179.0	167.0	167.0
17.5°	490.9	470.9	431.9	395.9	334.9	248.9	176.0	137.0	133.0	135.0	135.0
20°	515.9	488.9	447.9	399.9	286.9	177.0	129.0	125.0	127.0	131.0	130.0
22.5°	531.9	504.9	459.9	381.9	222.0	127.0	121.0	119.0	121.0	126.0	126.0
25°	544.9	527.9	478.9	337.9	157.0	115.0	113.0	115.0	117.0	119.0	122.0
27.5°	576.9	547.9	491.9	280.9	113.0	107.0	109.0	110.0	110.0	113.0	114.0
30°	597.9	574.9	501.9	217.0	100.0	99.0	101.0	102.0	103.0	106.0	107.0
32.5°	617.9	609.9	488.9	147.0	94.0	92.0	91.0	92.0	96.0	99.0	98.0
35°	646.9	641.9	469.9	102.0	88.0	84.0	82.0	83.0	86.0	89.0	88.0
37.5°	681.9	686.9	423.9	89.0	82.0	77.0	73.0	73.0	74.0	77.0	78.0
40°	722.8	735.8	369.9	83.0	78.0	72.0	68.0	63.0	62.0	61.0	62.0
42.5°	797.8	812.8	308.9	79.0	72.0	65.0	59.0	53.0	48.0	45.0	45.0
45°	902.8	890.8	229.0	75.0	69.0	59.0	50.0	43.0	36.0	33.0	33.0
47.5°	1047.8	1006.8	157.0	71.0	64.0	52.0	42.0	33.0	27.0	24.0	24.0
50°	1248.7	1113.8	102.0	67.0	61.0	45.0	34.0	24.0	20.0	19.0	20.0
52.5°	1438.7	1222.7	81.0	62.0	55.0	39.0	26.0	20.0	18.0	17.0	17.0
55°	1613.6	1277.7	72.0	57.0	50.0	32.0	22.0	17.0	16.0	15.0	15.0
57.5°	1761.6	1296.7	62.0	50.0	40.0	25.0	18.0	15.0	13.0	12.0	12.0
60°	1889.6	1301.7	48.0	40.0	29.0	19.0	15.0	13.0	11.0	9.0	9.0
62.5°	1991.6	1266.7	34.0	28.0	20.0	15.0	13.0	9.0	6.0	4.0	3.0
65°	2072.5	1196.7	23.0	19.0	13.0	11.0	8.0	4.0	1.0	0.0	0.0
67.5°	1977.6	1037.8	18.0	14.0	9.0	7.0	4.0	1.0	0.0	0.0	0.0
70°	1612.6	804.8	13.0	9.0	6.0	2.0	1.0	0.0	0.0	0.0	0.0
72.5°	1097.8	518.9	10.0	6.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0
75°	492.9	186.0	7.0	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	120.0	44.0	5.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	32.0	11.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	12.0	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)