

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: P676751

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

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676751  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1B-830-U-T4W-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @450mA w/  
T4W distribution lens and House Side Shield  
Light Source: (16) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

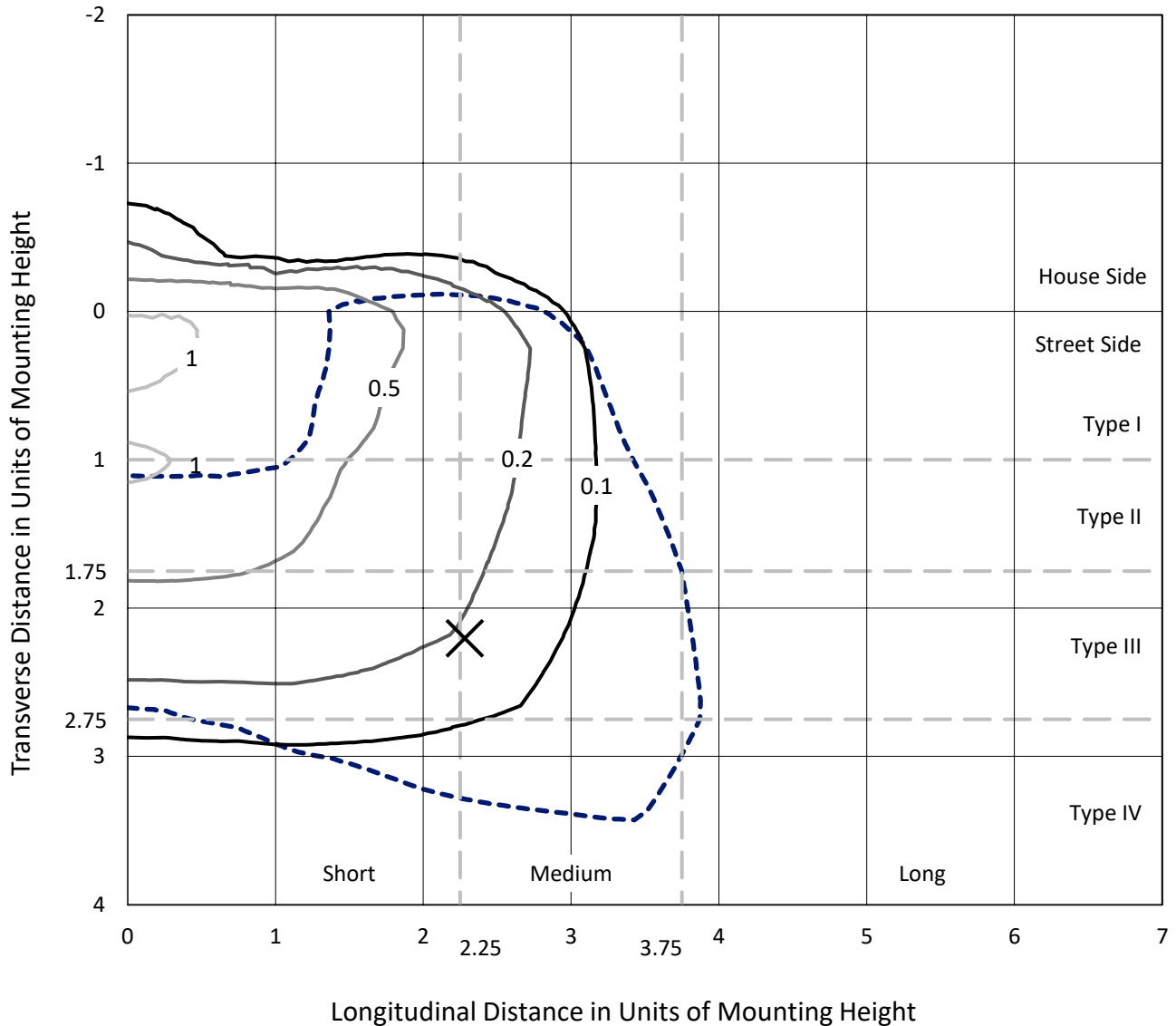
Lumens per Lamp: N/A  
Luminaire Lumens: 1979.9 lumens  
Efficiency: N/A  
Efficacy: 82.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B0 - U0 - G1

Input Watts (W): 24  
Input Voltage (V): 120  
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: P676751  
 CATALOG NUMBER: CCW-SA-1B-830-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

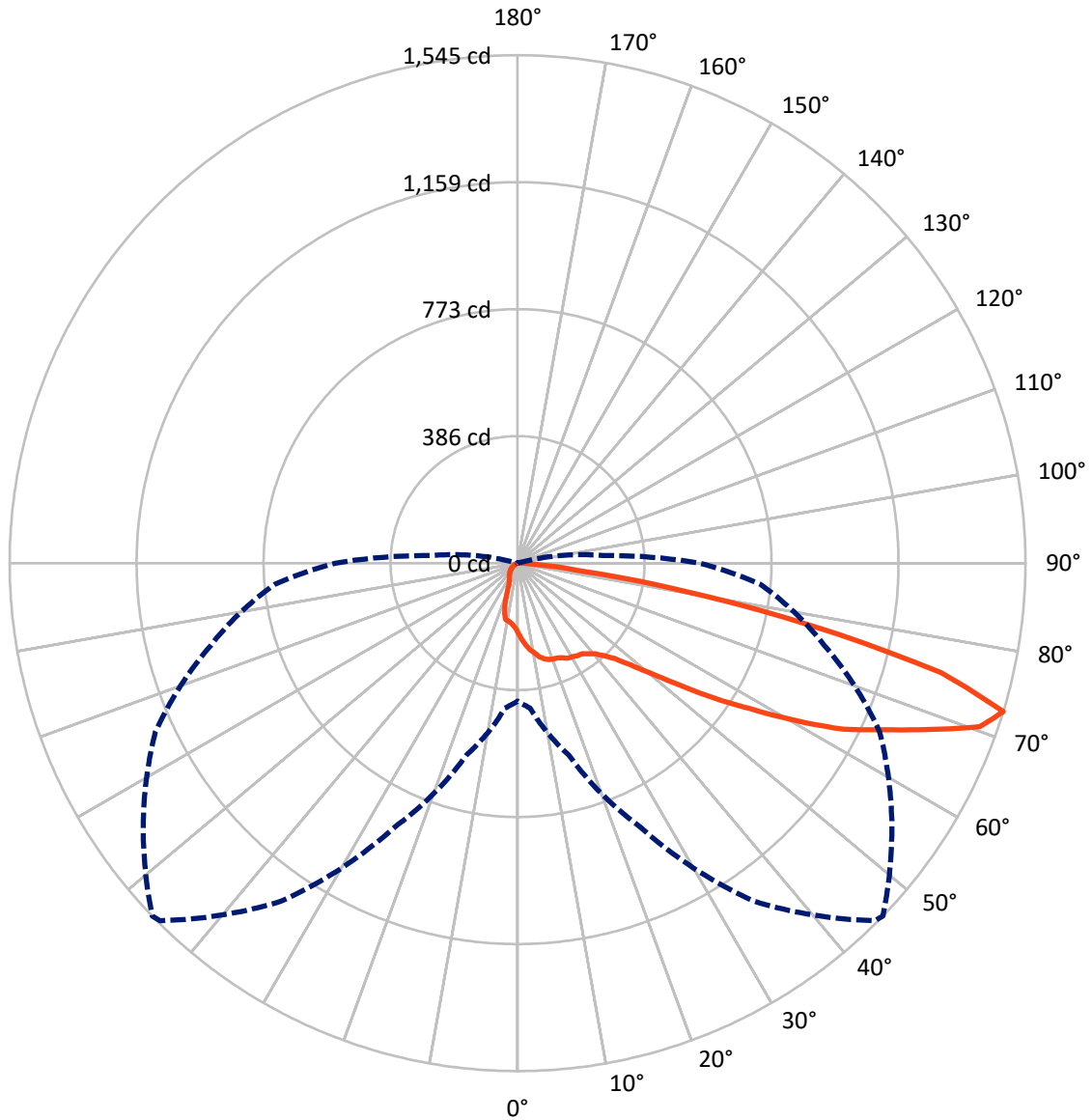
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.4 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P676751  
CATALOG NUMBER: CCW-SA-1B-830-U-T4W-HSS

### Luminous Intensity Polar Plot



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

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 CATALOG NUMBER: CCW-SA-1B-830-U-T4W-HSS

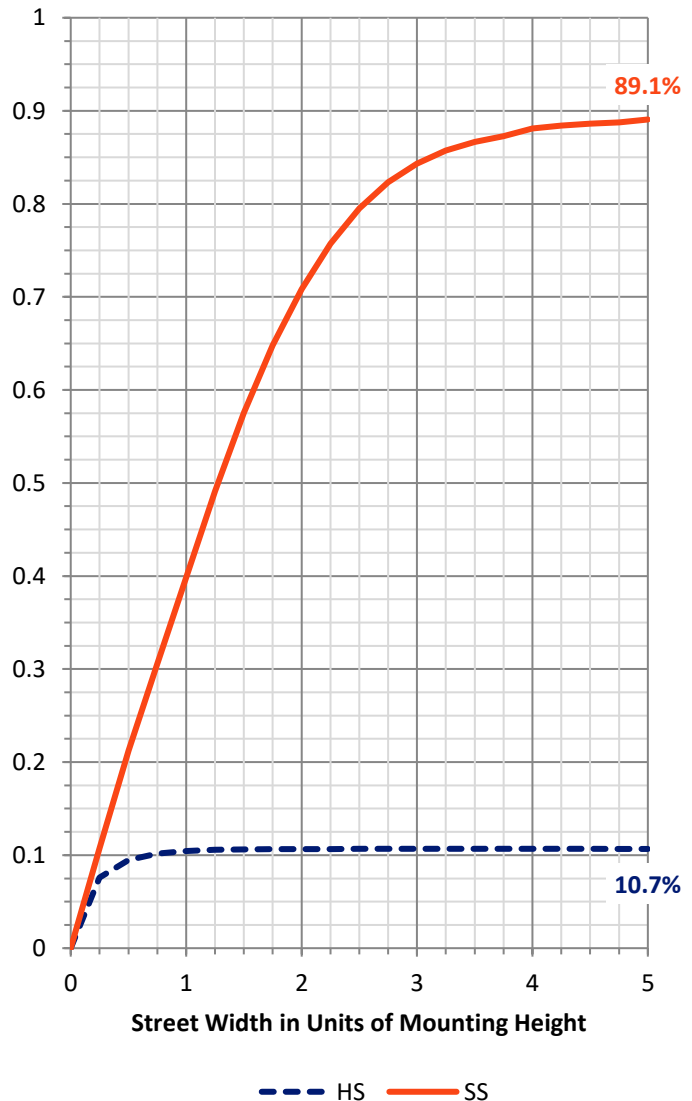
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	213.2	0.0	213.2
	% Fixture	10.8	0.0	10.8
<b>Street Side</b>	Lumens	1766.7	0.0	1766.7
	% Fixture	89.2	0.0	89.2
<b>Total</b>	Lumens	1979.9	0.0	1979.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.2	1.1
10°-20°	63.9	3.2
20°-30°	100.1	5.1
30°-40°	140.2	7.1
40°-50°	231.2	11.7
50°-60°	415.5	21.0
60°-70°	602.2	30.4
70°-80°	375.8	19.0
80°-90°	29.8	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°	1979.9	100.0
0°-180°	1979.9	100.0

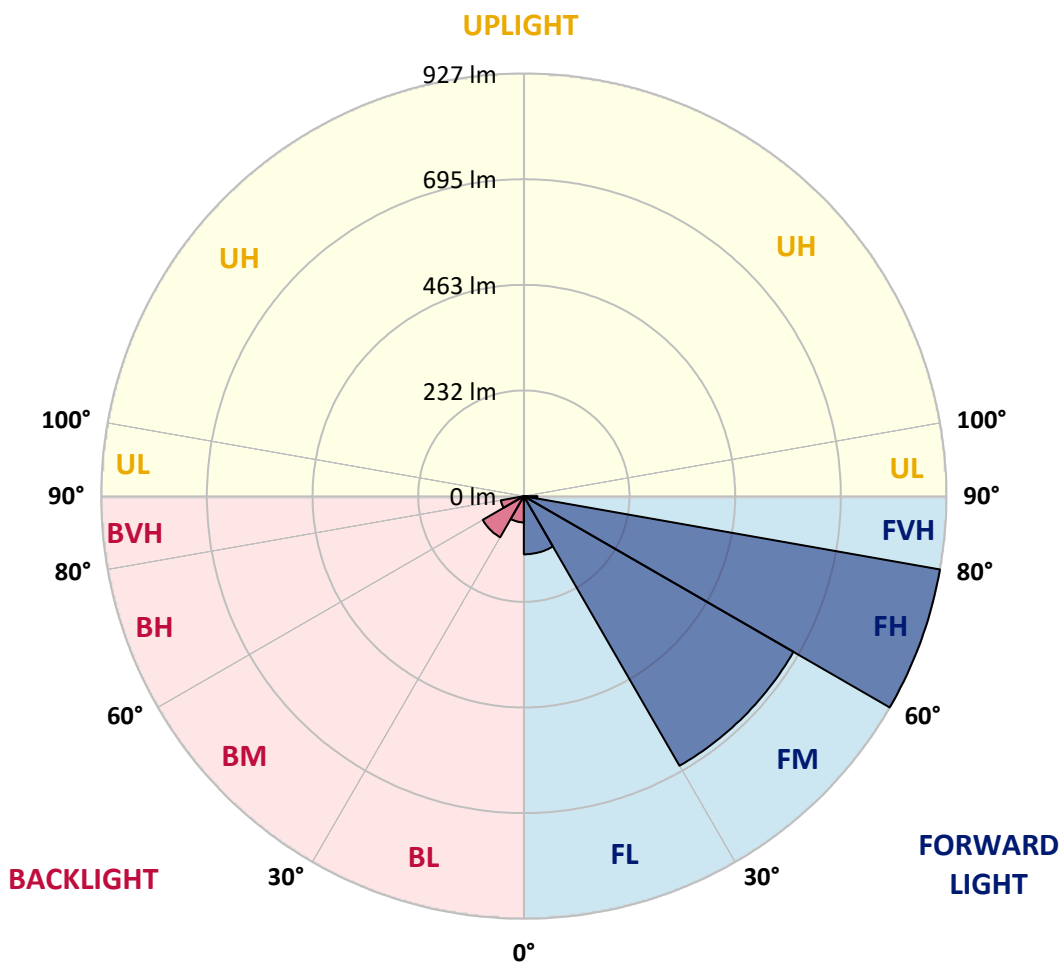


REPORT NUMBER: P676751  
 CATALOG NUMBER: CCW-SA-1B-830-U-T4W-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	127.6	6.4			
FM (30°-60°)	682.7	34.5			
FH (60°-80°)	926.8	46.8			G1/1800
FVH (80°-90°)	29.6	1.5			G1/100
BL (0°-30°)	57.6	2.9	B0/110		
BM (30°-60°)	104.1	5.3	B0/220		
BH (60°-80°)	51.3	2.6	B0/110		G0/110
BVH (80°-90°)	0.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**  
 Type IV Medium





REPORT NUMBER: P676751

CATALOG NUMBER: CCW-SA-1B-830-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6
2.5°	236.9	235.8	237.4	236.9	230.8	231.8	231.3	227.3	220.2	216.1	213.6
5°	264.1	266.7	264.6	260.1	256.6	249.5	248.5	241.9	230.8	223.7	216.1
7.5°	292.4	292.4	288.4	281.3	273.7	266.1	265.1	254.0	244.4	232.3	221.7
10°	313.6	311.1	308.1	300.5	291.9	281.8	276.8	268.7	258.1	243.4	229.8
12.5°	332.3	328.3	323.2	312.1	302.0	290.9	291.9	278.8	271.7	258.6	238.4
15°	342.9	339.4	334.8	324.7	309.1	304.0	302.0	293.9	281.3	268.2	249.0
17.5°	345.4	342.9	336.8	323.7	315.1	309.1	308.6	299.0	293.4	282.3	261.1
20°	340.4	335.8	331.3	322.7	314.6	312.6	311.1	311.1	304.0	289.4	268.7
22.5°	331.8	326.7	324.2	319.2	312.6	312.1	313.1	312.1	306.5	297.0	276.8
25°	325.2	322.7	318.7	317.2	313.1	320.7	319.2	317.7	316.1	305.0	289.4
27.5°	327.3	326.7	323.7	317.7	314.6	322.7	327.3	327.8	327.3	316.1	301.0
30°	328.3	325.7	322.7	321.2	322.2	330.3	330.3	341.4	336.8	325.7	312.6
32.5°	339.9	338.4	328.3	324.7	325.2	334.8	335.3	346.4	344.9	337.4	322.7
35°	364.6	354.5	339.9	329.8	329.8	342.4	338.4	354.5	358.6	346.4	329.8
37.5°	401.5	393.9	367.7	344.9	336.3	345.4	349.5	358.6	370.7	360.1	343.9
40°	474.7	473.2	435.8	386.8	353.0	361.1	362.6	376.7	384.8	370.2	365.6
42.5°	581.8	574.2	539.4	462.1	383.3	379.8	385.3	394.4	413.6	401.5	390.4
45°	686.3	682.8	647.9	561.6	438.4	417.1	414.1	430.3	458.6	445.4	436.8
47.5°	762.1	755.0	735.3	662.6	519.2	461.1	463.1	479.3	515.1	505.0	507.5
50°	820.2	816.6	795.9	756.0	621.2	530.3	526.2	542.4	590.9	597.4	604.5
52.5°	883.8	890.4	862.6	828.7	741.9	623.2	614.1	619.7	682.3	697.4	717.1
55°	944.9	955.5	927.7	923.2	868.1	726.2	724.7	711.6	792.4	794.4	805.0
57.5°	984.8	981.3	979.2	1004.0	994.4	844.4	836.8	823.7	896.9	883.8	915.6
60°	987.8	997.9	1031.8	1092.9	1110.0	983.3	972.2	936.3	987.3	956.0	1016.6
62.5°	1010.5	1018.6	1081.3	1165.6	1187.8	1105.5	1113.1	1022.2	1064.6	1039.8	1128.7
65°	953.0	978.2	1104.0	1222.2	1289.8	1229.2	1221.6	1132.8	1143.9	1120.6	1239.3
67.5°	901.0	910.6	1041.9	1239.3	1370.6	1353.5	1350.4	1230.7	1225.7	1182.8	1270.6
70°	732.3	743.9	873.7	1151.4	1397.9	1498.4	1491.3	1368.1	1281.2	1148.9	1110.0
72.5°	419.7	442.9	605.5	886.8	1256.0	1538.8	1545.4	1390.3	1215.6	966.1	741.4
75°	137.4	143.9	251.5	502.5	939.3	1342.3	1330.7	1194.9	980.8	637.8	334.8
77.5°	46.5	47.5	74.2	181.8	520.7	907.0	913.6	854.0	602.5	265.1	92.4
80°	23.7	25.3	36.4	68.2	214.1	493.9	504.5	486.8	252.5	78.3	22.2
82.5°	11.1	11.6	21.2	37.9	98.0	193.9	193.9	213.1	89.4	43.9	9.1
85°	4.0	4.0	11.1	21.7	41.4	64.6	65.1	65.7	47.0	32.8	4.0
87.5°	1.5	1.5	5.6	9.1	15.2	19.7	19.7	15.7	23.7	21.7	1.5
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: P676751  
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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6
2.5°	212.6	209.6	207.1	203.5	199.0	196.5	197.0	193.9	193.9	192.4	191.9
5°	212.6	209.6	203.0	197.0	192.9	187.9	185.3	183.3	183.3	182.3	182.8
7.5°	214.1	209.6	200.5	192.4	185.8	180.8	176.8	176.3	175.2	172.7	174.7
10°	223.2	216.7	201.5	190.4	182.8	177.3	170.2	168.2	165.1	160.6	161.1
12.5°	230.8	222.2	208.6	193.4	183.8	174.7	158.6	140.9	133.3	125.2	125.8
15°	241.9	229.8	211.1	197.5	183.8	154.5	125.2	102.5	90.4	84.3	84.3
17.5°	248.0	237.9	218.2	200.0	169.2	125.8	88.9	69.2	67.2	68.2	68.2
20°	260.6	247.0	226.2	202.0	144.9	89.4	65.1	63.1	64.1	66.2	65.7
22.5°	268.7	255.0	232.3	192.9	112.1	64.1	61.1	60.1	61.1	63.6	63.6
25°	275.2	266.7	241.9	170.7	79.3	58.1	57.1	58.1	59.1	60.1	61.6
27.5°	291.4	276.8	248.5	141.9	57.1	54.0	55.0	55.6	55.6	57.1	57.6
30°	302.0	290.4	253.5	109.6	50.5	50.0	51.0	51.5	52.0	53.5	54.0
32.5°	312.1	308.1	247.0	74.2	47.5	46.5	46.0	46.5	48.5	50.0	49.5
35°	326.7	324.2	237.4	51.5	44.4	42.4	41.4	41.9	43.4	44.9	44.4
37.5°	344.4	346.9	214.1	44.9	41.4	38.9	36.9	36.9	37.4	38.9	39.4
40°	365.1	371.7	186.9	41.9	39.4	36.4	34.3	31.8	31.3	30.8	31.3
42.5°	403.0	410.6	156.1	39.9	36.4	32.8	29.8	26.8	24.2	22.7	22.7
45°	456.0	450.0	115.6	37.9	34.8	29.8	25.3	21.7	18.2	16.7	16.7
47.5°	529.3	508.6	79.3	35.9	32.3	26.3	21.2	16.7	13.6	12.1	12.1
50°	630.8	562.6	51.5	33.8	30.8	22.7	17.2	12.1	10.1	9.6	10.1
52.5°	726.7	617.6	40.9	31.3	27.8	19.7	13.1	10.1	9.1	8.6	8.6
55°	815.1	645.4	36.4	28.8	25.3	16.2	11.1	8.6	8.1	7.6	7.6
57.5°	889.8	655.0	31.3	25.3	20.2	12.6	9.1	7.6	6.6	6.1	6.1
60°	954.5	657.5	24.2	20.2	14.6	9.6	7.6	6.6	5.6	4.5	4.5
62.5°	1006.0	639.9	17.2	14.1	10.1	7.6	6.6	4.5	3.0	2.0	1.5
65°	1046.9	604.5	11.6	9.6	6.6	5.6	4.0	2.0	0.5	0.0	0.0
67.5°	998.9	524.2	9.1	7.1	4.5	3.5	2.0	0.5	0.0	0.0	0.0
70°	814.6	406.5	6.6	4.5	3.0	1.0	0.5	0.0	0.0	0.0	0.0
72.5°	554.5	262.1	5.1	3.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0
75°	249.0	93.9	3.5	2.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	60.6	22.2	2.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	16.2	5.6	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.1	2.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	0.5	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)