

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: McGRAW-EDISON

Report Number: P594845

Luminaire Tested: **ISS-PA1E-830-U-T4W-HSS**

Issue Date: 3/22/2022

Test Information

Test Method: LM-79-08
Report Number: P594845
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2201-510-13)
Test Lab: INNOVATION CENTER
Issue Date: 3/22/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: ISS-PA1E-830-U-T4W-HSS
Description: IMPACT ELITE LED QUARTER SPHERE LUMINAIRE
(1) 80 CRI, 3000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6276 lumens
Efficiency: N/A
Efficacy: 76.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

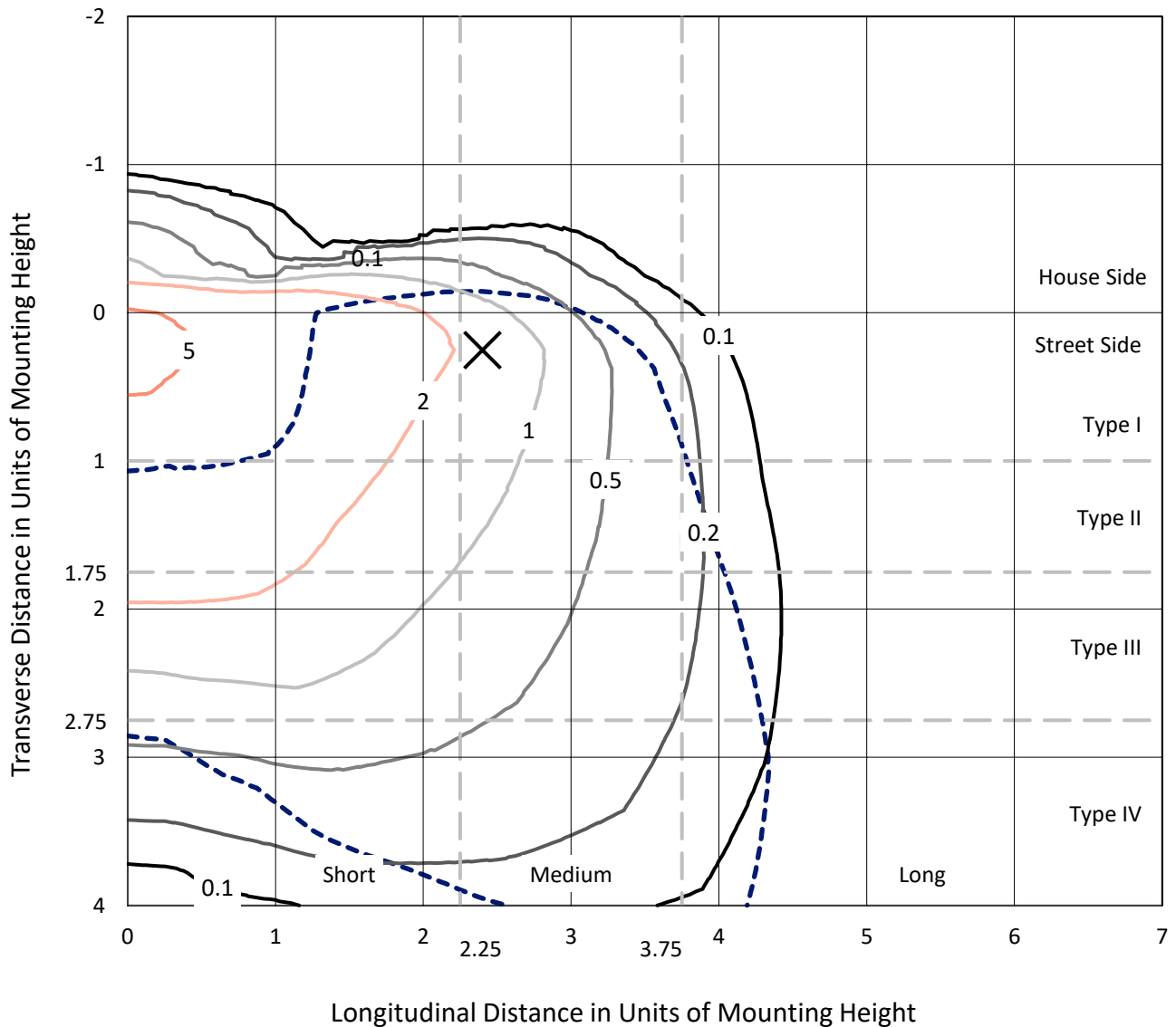
Input Watts (W): 82.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P594845
 CATALOG NUMBER: ISS-PA1E-830-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

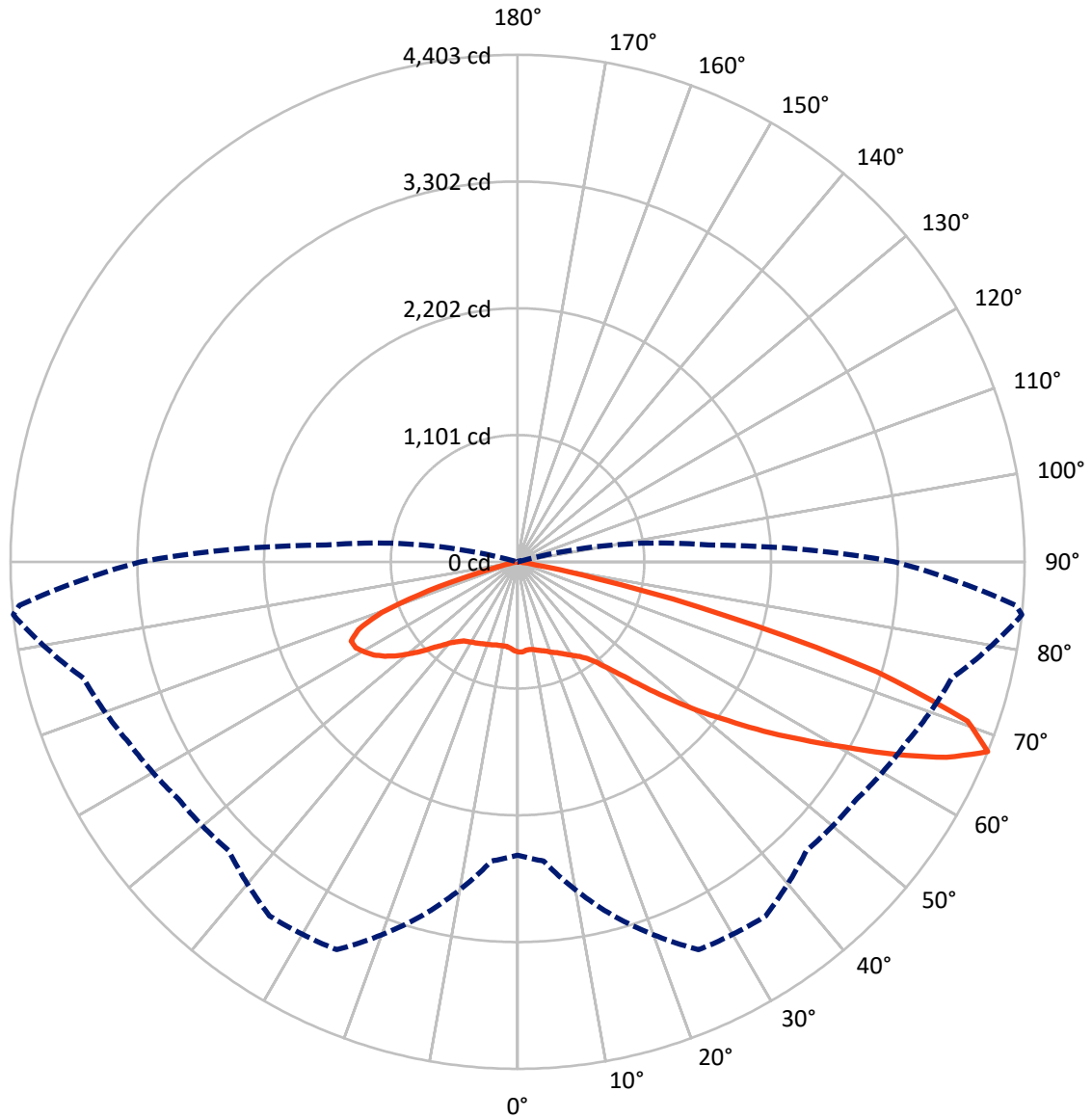
× Max cd
 - - - 1/2 Max cd



Based on 12 foot mounting height. Maximum calculated value = 6.4 fc
 Type IV - Medium - N/A

REPORT NUMBER: P594845
CATALOG NUMBER: ISS-PA1E-830-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 84-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P594845

CATALOG NUMBER: ISS-PA1E-830-U-T4W-HSS

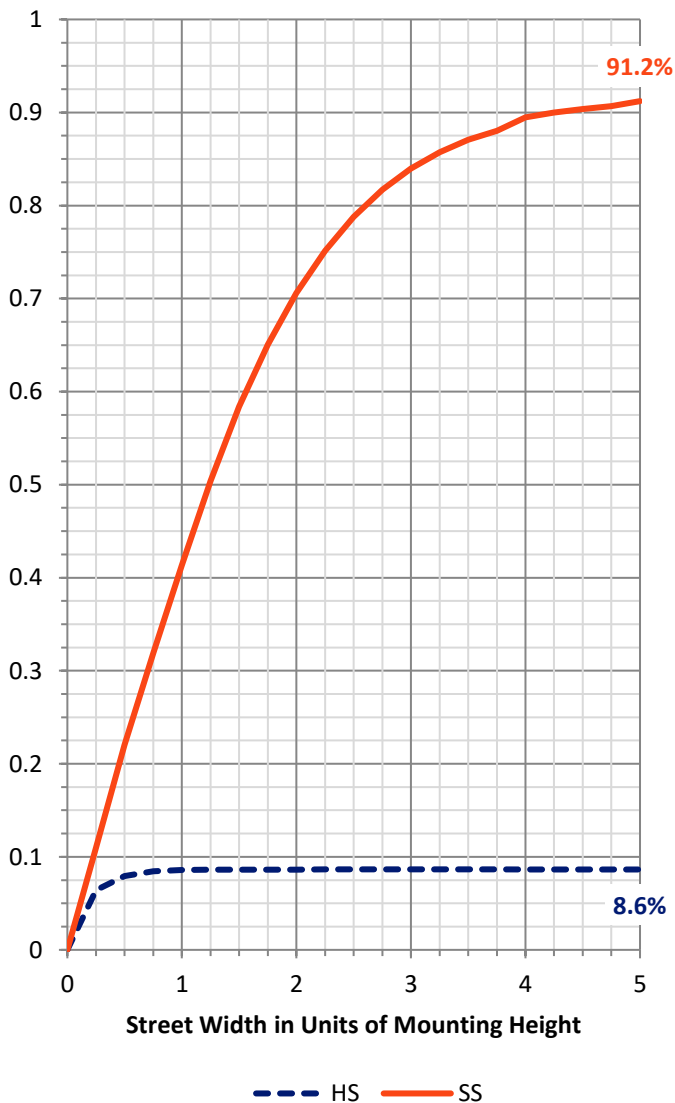
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	546.4	0.0	546.4
	% Fixture	8.7	0.0	8.7
Street Side	Lumens	5729.6	0.0	5729.6
	% Fixture	91.3	0.0	91.3
Total	Lumens	6276.0	0.0	6276.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.1	1.1
10°-20°	183.4	2.9
20°-30°	293.7	4.7
30°-40°	422.7	6.7
40°-50°	725.5	11.6
50°-60°	1267.5	20.2
60°-70°	1815.1	28.9
70°-80°	1364.2	21.7
80°-90°	133.9	2.1
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°	6276.0	100.0
0°-180°	6276.0	100.0

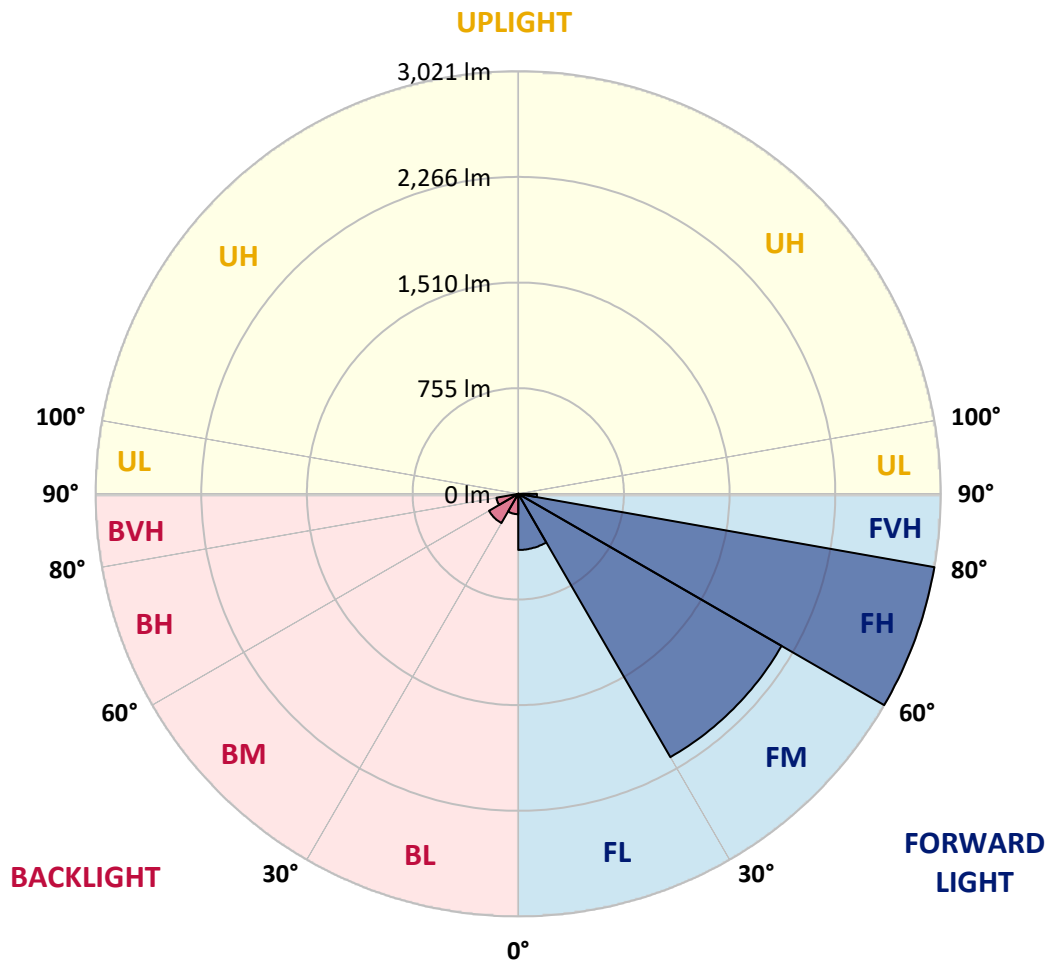


REPORT NUMBER: P594845
 CATALOG NUMBER: ISS-PA1E-830-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	401.2	6.4			
FM (30°-60°)	2173.9	34.6			
FH (60°-80°)	3020.9	48.1			G2/5000
FVH (80°-90°)	133.5	2.1			G2/225
BL (0°-30°)	145.9	2.3	B1/500		
BM (30°-60°)	241.6	3.9	B1/1000		
BH (60°-80°)	158.4	2.5	B1/500		G1/500
BVH (80°-90°)	0.4	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





REPORT NUMBER: P594845
 CATALOG NUMBER: ISS-PA1E-830-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	781.9	781.9	781.9	781.9	781.9	781.9	781.9	781.9	781.9	781.9	781.9
2.5°	826.4	830.7	832.8	822.2	822.2	813.7	801.0	796.7	790.4	784.0	781.9
5°	868.8	875.2	873.0	860.3	854.0	837.0	820.1	803.1	786.2	771.3	771.3
7.5°	917.5	919.6	913.3	892.1	879.4	856.1	830.7	811.6	790.4	769.2	765.0
10°	959.9	957.8	949.3	928.1	904.8	875.2	847.6	826.4	801.0	775.6	773.4
12.5°	989.6	991.7	981.1	951.4	928.1	894.2	866.7	845.5	815.8	788.3	781.9
15°	1015.0	1021.4	1008.6	979.0	945.1	915.4	894.2	866.7	832.8	801.0	796.7
17.5°	1038.3	1040.4	1029.8	995.9	964.1	938.7	915.4	890.0	856.1	815.8	811.6
20°	1051.0	1057.4	1051.0	1008.6	979.0	959.9	940.8	915.4	877.3	839.1	834.9
22.5°	1059.5	1065.9	1063.7	1017.1	991.7	976.9	959.9	936.6	900.6	856.1	851.8
25°	1063.7	1068.0	1072.2	1025.6	1004.4	998.1	983.2	962.0	928.1	881.5	877.3
27.5°	1070.1	1074.3	1078.6	1036.2	1027.7	1021.4	1017.1	1000.2	959.9	911.2	904.8
30°	1080.7	1087.1	1091.3	1055.3	1055.3	1061.6	1061.6	1038.3	993.8	943.0	938.7
32.5°	1093.4	1095.5	1104.0	1074.3	1084.9	1099.8	1095.5	1072.2	1025.6	979.0	972.6
35°	1127.3	1127.3	1142.1	1104.0	1116.7	1129.4	1133.7	1116.7	1074.3	1027.7	1025.6
37.5°	1210.0	1210.0	1222.7	1161.2	1159.1	1171.8	1186.6	1186.6	1144.3	1101.9	1097.6
40°	1396.4	1396.4	1396.4	1254.5	1231.1	1246.0	1269.3	1282.0	1246.0	1216.3	1216.3
42.5°	1707.9	1710.0	1678.3	1426.1	1326.5	1351.9	1377.4	1404.9	1385.8	1364.6	1360.4
45°	2030.0	2019.4	2015.2	1678.3	1496.0	1483.3	1515.1	1561.7	1568.1	1555.4	1563.8
47.5°	2250.4	2261.0	2267.3	1991.9	1733.3	1646.5	1676.1	1741.8	1780.0	1777.8	1790.6
50°	2464.4	2470.8	2477.1	2337.3	2047.0	1852.0	1871.1	1960.1	2013.1	2030.0	2038.5
52.5°	2650.9	2633.9	2661.5	2642.4	2379.6	2087.2	2087.2	2188.9	2284.3	2290.6	2288.5
55°	2706.0	2716.6	2799.2	2856.4	2720.8	2375.4	2333.0	2441.1	2542.8	2595.8	2595.8
57.5°	2828.9	2839.5	2939.1	3068.3	2968.7	2659.4	2595.8	2701.7	2811.9	2913.6	2928.5
60°	2989.9	2992.0	3098.0	3295.1	3157.3	2915.8	2862.8	2983.6	3093.8	3267.5	3316.2
62.5°	3076.8	3085.3	3231.5	3490.0	3394.7	3140.4	3127.7	3237.8	3379.8	3685.0	3729.5
65°	2943.3	2998.4	3316.2	3606.6	3587.5	3350.2	3394.7	3483.6	3646.8	4093.9	4136.3
67.5°	2547.0	2608.5	3176.4	3716.7	3754.9	3547.2	3593.8	3723.1	3903.2	4403.3	4344.0
70°	2345.7	2396.6	2837.4	3778.2	3894.7	3767.6	3788.8	3909.6	3962.5	4144.8	4081.2
72.5°	1777.8	1830.8	2400.8	3568.4	4015.5	3998.6	3945.6	3846.0	3532.4	3261.2	3106.5
75°	786.2	847.6	1597.7	2788.6	3716.7	4129.9	3850.2	3292.9	2536.5	1852.0	1716.4
77.5°	347.5	383.5	618.8	1549.0	2792.9	3574.8	3045.0	2195.3	1273.5	688.7	639.9
80°	112.3	116.5	194.9	542.5	1428.2	2366.9	1864.7	1055.3	392.0	161.0	150.4
82.5°	44.5	48.7	93.2	228.9	591.2	940.8	915.4	381.4	114.4	42.4	42.4
85°	12.7	14.8	46.6	120.8	209.8	264.9	324.2	127.1	61.5	12.7	12.7
87.5°	4.2	4.2	17.0	38.1	40.3	27.5	61.5	48.7	38.1	4.2	4.2
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: P594845
 CATALOG NUMBER: ISS-PA1E-830-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	781.9	781.9	781.9	781.9	781.9	781.9	781.9	781.9	781.9	781.9	781.9
2.5°	777.7	773.4	762.8	754.4	750.1	743.8	735.3	731.1	731.1	728.9	722.6
5°	762.8	756.5	737.4	724.7	714.1	690.8	673.8	652.7	631.5	625.1	631.5
7.5°	756.5	743.8	718.3	692.9	648.4	587.0	546.7	502.2	487.4	468.3	470.4
10°	758.6	743.8	707.7	650.5	563.7	472.5	409.0	349.6	320.0	305.1	307.3
12.5°	765.0	748.0	697.2	593.3	468.3	358.1	260.6	214.0	205.5	205.5	205.5
15°	777.7	752.2	680.2	525.5	366.6	237.3	184.4	180.1	186.5	192.8	194.9
17.5°	790.4	765.0	654.8	455.6	267.0	178.0	171.6	171.6	178.0	184.4	186.5
20°	805.2	777.7	618.8	381.4	190.7	167.4	165.3	163.2	167.4	173.8	175.9
22.5°	828.5	790.4	576.4	294.5	165.3	161.0	156.8	154.7	156.8	163.2	165.3
25°	849.7	807.3	531.9	218.3	154.7	150.4	148.3	146.2	146.2	150.4	152.6
27.5°	875.2	826.4	483.1	163.2	142.0	139.9	137.7	135.6	133.5	137.7	139.9
30°	906.9	843.4	430.2	137.7	129.3	127.1	125.0	122.9	120.8	122.9	125.0
32.5°	947.2	866.7	368.7	125.0	118.7	112.3	110.2	110.2	108.1	108.1	110.2
35°	1000.2	892.1	303.0	116.5	108.1	101.7	95.4	93.2	93.2	93.2	95.4
37.5°	1078.6	938.7	239.4	108.1	99.6	89.0	82.6	76.3	76.3	76.3	76.3
40°	1186.6	989.6	186.5	101.7	93.2	78.4	69.9	61.5	57.2	55.1	57.2
42.5°	1354.0	1065.9	144.1	93.2	89.0	69.9	57.2	46.6	38.1	36.0	38.1
45°	1538.4	1148.5	114.4	86.9	80.5	59.3	44.5	31.8	23.3	21.2	23.3
47.5°	1771.5	1252.3	97.5	78.4	69.9	48.7	31.8	17.0	10.6	12.7	12.7
50°	1996.1	1354.0	89.0	72.0	61.5	40.3	19.1	8.5	4.2	6.4	6.4
52.5°	2244.0	1462.1	82.6	63.6	53.0	29.7	10.6	2.1	0.0	2.1	2.1
55°	2494.1	1559.6	76.3	57.2	42.4	21.2	4.2	0.0	0.0	0.0	2.1
57.5°	2765.3	1642.2	69.9	48.7	31.8	12.7	2.1	0.0	0.0	0.0	0.0
60°	2992.0	1705.8	63.6	42.4	21.2	6.4	0.0	0.0	0.0	0.0	0.0
62.5°	3199.7	1763.0	48.7	31.8	12.7	4.2	0.0	0.0	0.0	0.0	0.0
65°	3337.4	1775.7	33.9	21.2	8.5	2.1	0.0	0.0	0.0	0.0	0.0
67.5°	3276.0	1665.5	21.2	14.8	4.2	2.1	0.0	0.0	0.0	0.0	0.0
70°	2879.7	1398.5	14.8	8.5	2.1	2.1	0.0	0.0	0.0	0.0	0.0
72.5°	2015.2	902.7	12.7	6.4	2.1	2.1	0.0	0.0	0.0	0.0	0.0
75°	1063.7	326.3	8.5	4.2	2.1	2.1	0.0	0.0	0.0	0.0	0.0
77.5°	377.2	72.0	4.2	2.1	0.0	2.1	0.0	0.0	0.0	0.0	0.0
80°	82.6	14.8	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	23.3	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	0.0	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)