

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: P833177

Luminaire Tested: **TTN-D1-735-U-RW-CG-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833177
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TTN-D1-735-U-RW-CG-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3456.8 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U4 - G2

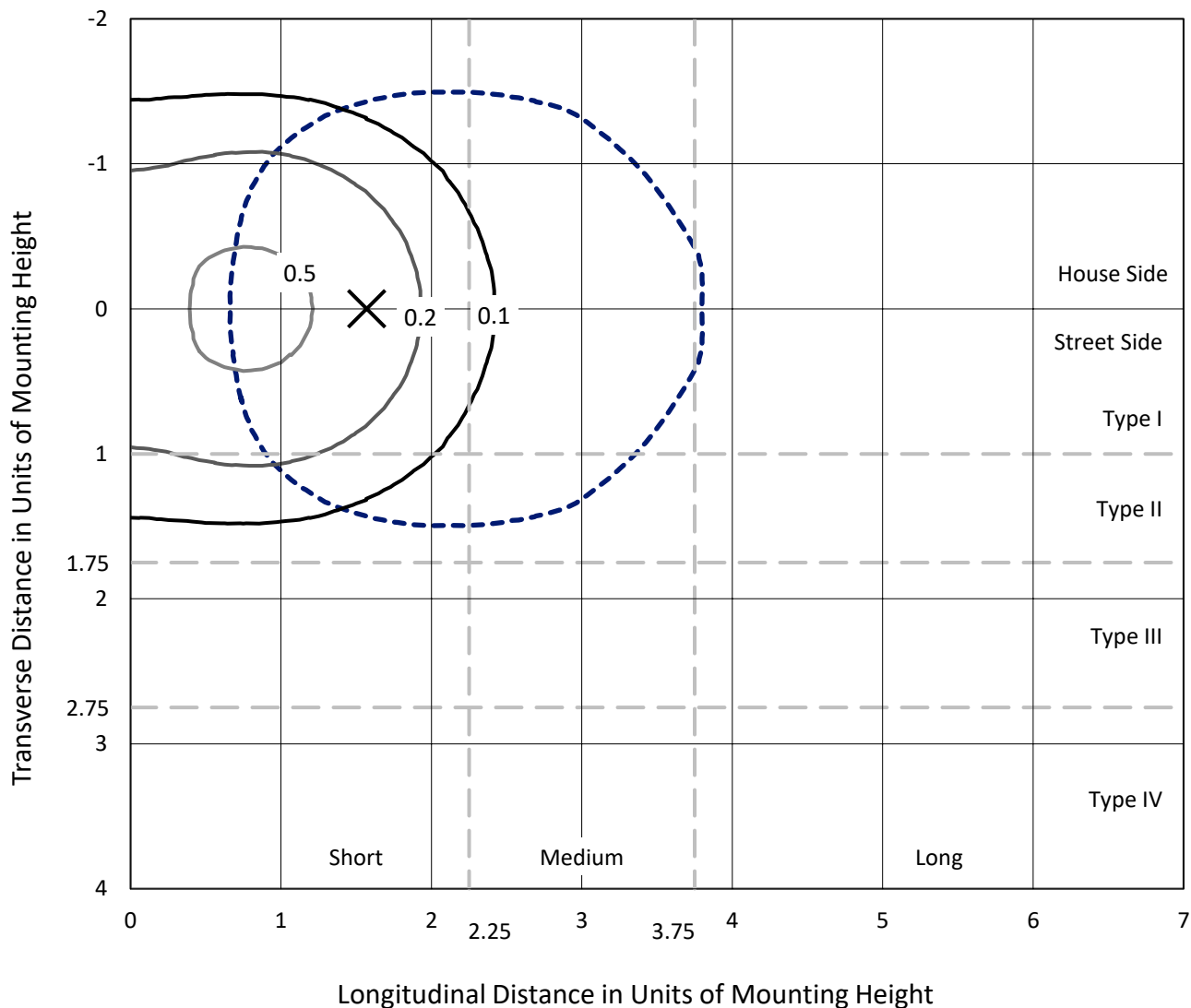
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

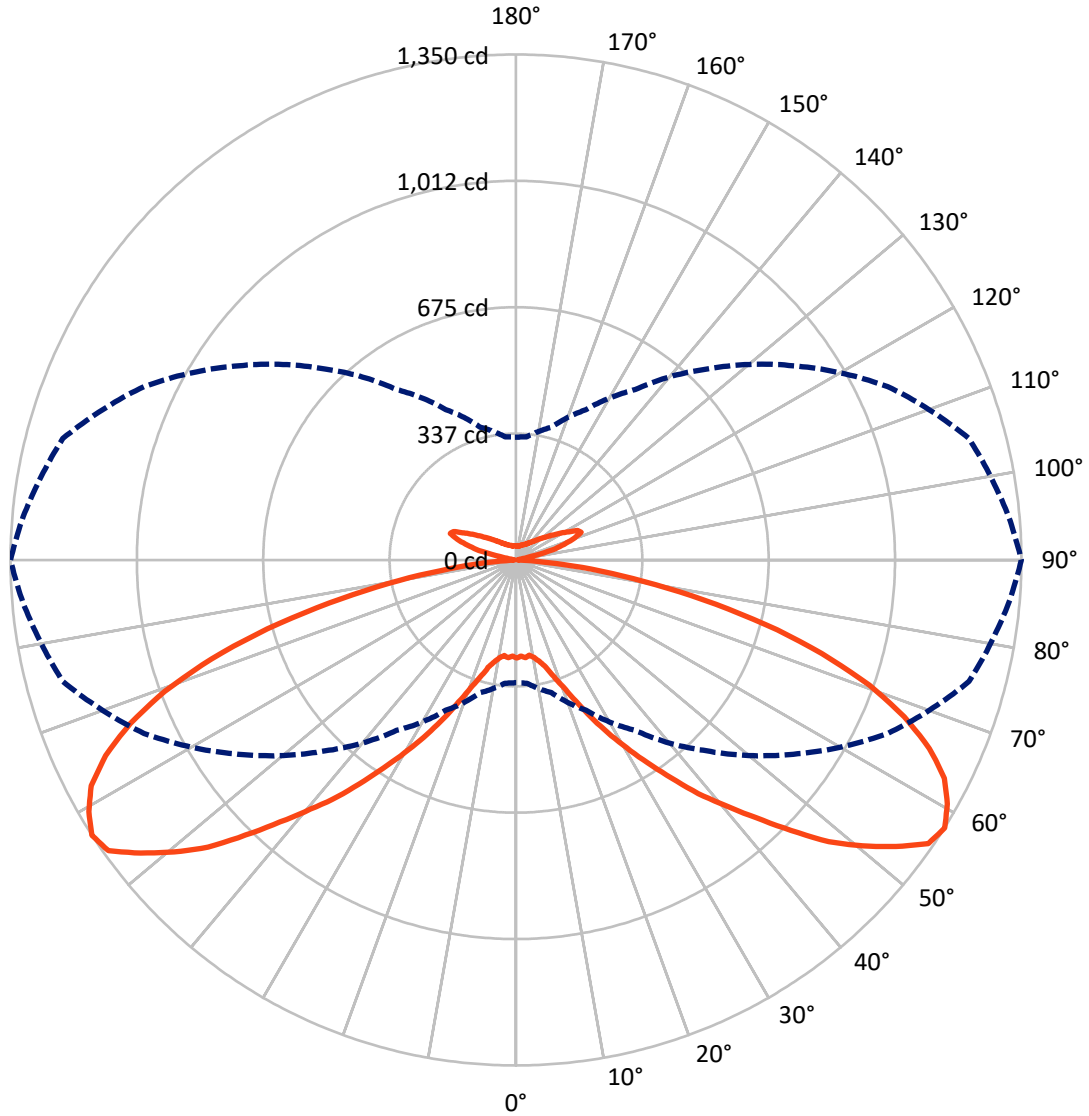
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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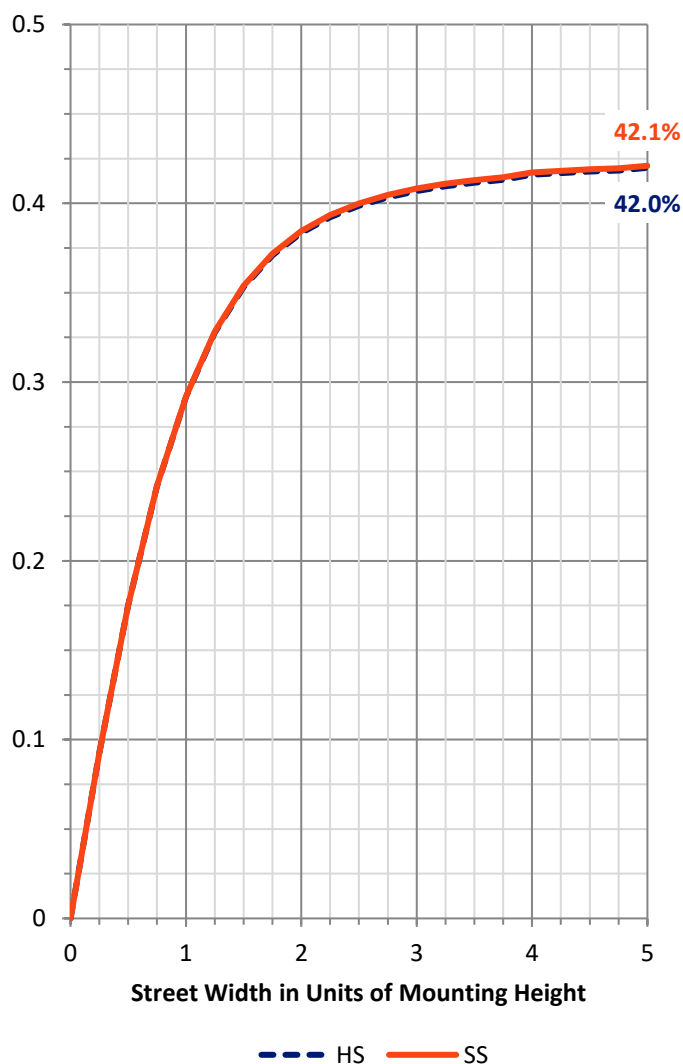
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1456.9	271.5	1728.4
	% Fixture	42.1	7.9	50.0
Street Side	Lumens	1456.9	271.5	1728.4
	% Fixture	42.1	7.9	50.0
Total	Lumens	2913.7	543.0	3456.8
	% Fixture	84.3	15.7	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.0	0.7
10°-20°	80.5	2.3
20°-30°	171.3	5.0
30°-40°	315.7	9.1
40°-50°	508.4	14.7
50°-60°	688.1	19.9
60°-70°	669.0	19.4
70°-80°	389.2	11.3
80°-90°	66.5	1.9
90°-100°	12.1	0.4
100°-110°	123.2	3.6
110°-120°	180.1	5.2
120°-130°	104.5	3.0
130°-140°	55.4	1.6
140°-150°	32.9	1.0
150°-160°	20.2	0.6
160°-170°	11.0	0.3
170°-180°	3.6	0.1
0°-90°	2913.7	84.3
0°-180°	3456.8	100.0

Coefficient of Utilization



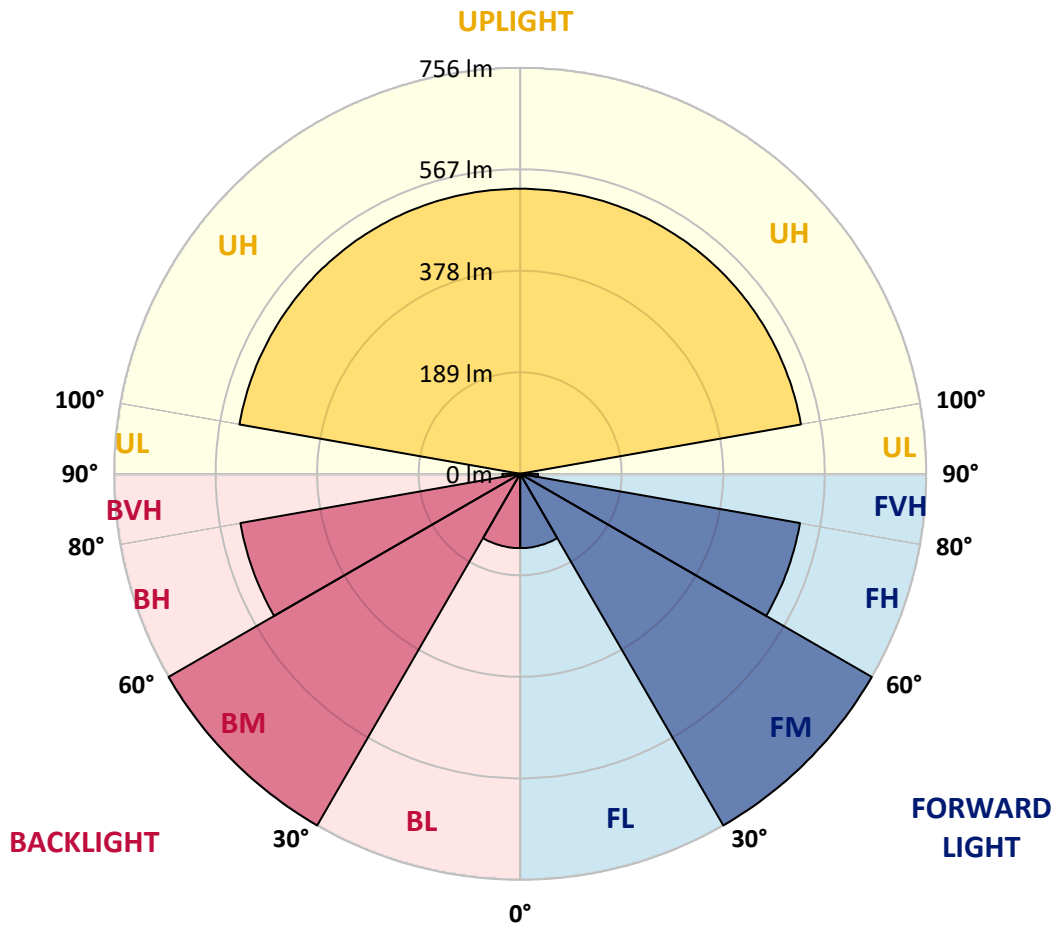
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	138.4	4.0			
FM (30°-60°)	756.1	21.9			
FH (60°-80°)	529.1	15.3			G0/660
FVH (80°-90°)	33.3	1.0			G1/100
BL (0°-30°)	138.4	4.0	B1/500		
BM (30°-60°)	756.1	21.9	B1/1000		
BH (60°-80°)	529.1	15.3	B2/1000		G2/1000
BVH (80°-90°)	33.3	1.0			G1/100
UL (90°-100°)	12.1	0.4		U2/50	
UH (100°-180°)	530.9	15.4		U4/1000	

BUG Rating: B2-U4-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	262.1	262.1	262.1	262.1	262.1	262.1	262.1	262.1	262.1	262.1	262.1
2.5°	262.1	262.1	262.1	262.1	259.5	259.5	259.5	256.9	256.9	256.9	256.9
5°	262.1	262.1	262.1	264.7	264.7	264.7	262.1	262.1	262.1	262.1	262.1
7.5°	262.1	264.7	264.7	262.1	262.1	259.5	259.5	259.5	256.9	256.9	256.9
10°	262.1	262.1	262.1	262.1	259.5	259.5	262.1	262.1	264.7	264.7	264.7
12.5°	259.5	259.5	262.1	262.1	262.1	264.7	270.0	272.6	275.2	277.8	277.8
15°	262.1	262.1	264.7	267.3	270.0	275.2	283.1	290.9	296.2	298.8	296.2
17.5°	262.1	264.7	267.3	272.6	280.4	288.3	301.4	311.9	322.4	325.0	327.6
20°	267.3	267.3	270.0	280.4	293.5	306.7	325.0	343.3	356.4	361.7	361.7
22.5°	270.0	272.6	275.2	288.3	309.3	330.2	356.4	377.4	395.8	406.2	408.9
25°	277.8	277.8	283.1	301.4	327.6	359.1	393.1	424.6	448.2	461.3	463.9
27.5°	283.1	285.7	293.5	317.1	351.2	390.5	437.7	474.4	503.2	518.9	521.6
30°	288.3	290.9	306.7	332.9	374.8	422.0	477.0	524.2	560.9	579.2	581.9
32.5°	296.2	298.8	317.1	346.0	395.8	453.4	516.3	574.0	626.4	642.1	644.8
35°	304.0	306.7	327.6	361.7	419.4	484.9	558.3	626.4	689.3	710.3	715.5
37.5°	311.9	314.5	335.5	377.4	442.9	518.9	605.4	686.7	754.8	783.7	791.5
40°	319.8	322.4	346.0	393.1	466.5	555.6	655.2	744.4	823.0	857.1	862.3
42.5°	325.0	327.6	353.8	406.2	490.1	589.7	707.7	807.3	891.1	935.7	940.9
45°	332.9	335.5	364.3	424.6	511.1	629.0	757.5	878.0	975.0	1024.8	1030.0
47.5°	338.1	340.7	372.2	435.1	534.7	665.7	809.9	940.9	1056.2	1108.7	1124.4
50°	340.7	343.3	377.4	445.6	550.4	691.9	851.8	1003.8	1127.0	1192.5	1200.4
52.5°	340.7	346.0	380.0	453.4	560.9	715.5	885.9	1056.2	1195.2	1268.5	1271.2
55°	338.1	340.7	377.4	450.8	566.1	726.0	909.5	1087.7	1242.3	1313.1	1336.7
57.5°	327.6	330.2	366.9	442.9	555.6	720.8	904.2	1095.6	1252.8	1321.0	1349.8
60°	311.9	317.1	351.2	424.6	539.9	702.4	888.5	1079.8	1237.1	1321.0	1323.6
62.5°	293.5	296.2	330.2	401.0	516.3	673.6	859.7	1048.4	1200.4	1286.9	1284.3
65°	267.3	270.0	298.8	372.2	474.4	618.5	802.0	998.6	1129.6	1221.4	1213.5
67.5°	238.5	241.1	267.3	332.9	424.6	558.3	723.4	914.7	1030.0	1124.4	1119.1
70°	207.1	207.1	230.6	285.7	372.2	490.1	636.9	804.6	920.0	998.6	1001.2
72.5°	170.4	170.4	191.3	238.5	311.9	411.5	537.3	686.7	781.0	849.2	854.4
75°	133.7	131.0	149.4	188.7	246.4	327.6	424.6	553.0	626.4	691.9	689.3
77.5°	94.4	94.4	104.8	136.3	178.2	243.7	314.5	416.7	466.5	521.6	511.1
80°	60.3	60.3	65.5	89.1	117.9	162.5	207.1	283.1	317.1	359.1	346.0
82.5°	31.5	28.8	34.1	47.2	62.9	89.1	115.3	165.1	180.8	212.3	201.8
85°	10.5	10.5	10.5	15.7	23.6	34.1	44.6	70.8	73.4	94.4	86.5
87.5°	2.6	0.0	0.0	2.6	2.6	2.6	2.6	7.9	7.9	15.7	10.5
90°	4.6	4.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6
92.5°	4.6	4.6	4.6	6.5	7.4	6.5	7.4	5.6	5.6	4.6	4.6
95°	5.6	5.6	6.5	8.4	10.2	11.1	11.1	6.5	6.5	5.6	5.6
97.5°	7.4	8.4	8.4	10.2	16.7	30.7	18.6	9.3	9.3	8.4	7.4
100°	12.1	13.0	13.0	23.2	49.2	66.0	47.4	24.2	17.7	13.0	13.0
102.5°	39.0	40.9	50.2	75.3	111.5	101.3	85.5	80.8	55.7	44.6	42.7
105°	99.4	98.5	105.9	125.4	156.1	153.3	141.2	128.2	110.6	102.2	102.2
107.5°	131.0	131.0	137.5	154.2	177.4	207.2	210.0	166.3	145.9	136.6	135.6
110°	147.7	147.7	153.3	167.2	197.9	239.7	237.8	205.3	180.2	168.2	166.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	151.4	152.4	159.8	181.2	214.6	233.2	224.8	211.8	200.7	191.4	189.5
115°	157.0	157.0	165.4	185.8	204.4	211.8	202.5	192.3	184.9	181.2	183.0
117.5°	155.1	157.9	159.8	170.9	183.0	188.6	183.9	170.0	164.4	162.6	159.8
120°	144.0	144.0	145.9	151.4	157.9	160.7	158.9	149.6	144.9	144.0	142.1
122.5°	128.2	129.1	128.2	131.0	135.6	138.4	136.6	129.1	127.3	127.3	125.4
125°	112.4	112.4	111.5	113.3	116.1	115.2	116.1	112.4	111.5	111.5	110.6
127.5°	101.3	100.3	98.5	99.4	100.3	100.3	101.3	97.5	98.5	99.4	98.5
130°	90.1	90.1	88.3	88.3	88.3	86.4	88.3	86.4	87.3	88.3	89.2
132.5°	79.9	79.9	77.1	76.2	76.2	76.2	77.1	76.2	78.0	79.9	79.9
135°	71.5	71.5	68.7	69.7	69.7	68.7	69.7	68.7	70.6	71.5	71.5
137.5°	65.0	65.0	63.2	63.2	63.2	62.2	63.2	63.2	64.1	66.0	66.9
140°	59.5	59.5	58.5	58.5	57.6	58.5	58.5	58.5	59.5	60.4	60.4
142.5°	56.7	55.7	54.8	53.9	54.8	54.8	54.8	53.9	54.8	56.7	56.7
145°	52.0	52.0	51.1	51.1	51.1	52.0	51.1	51.1	52.0	52.0	53.0
147.5°	49.2	49.2	48.3	49.2	49.2	49.2	49.2	48.3	49.2	49.2	50.2
150°	48.3	47.4	46.5	47.4	47.4	46.5	46.5	46.5	46.5	47.4	47.4
152.5°	45.5	45.5	44.6	45.5	44.6	44.6	44.6	44.6	44.6	45.5	46.5
155°	43.7	43.7	42.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7
157.5°	41.8	42.7	41.8	41.8	41.8	41.8	41.8	41.8	41.8	42.7	42.7
160°	40.9	40.9	40.9	40.9	39.9	39.9	39.9	40.9	40.9	40.9	41.8
162.5°	39.9	39.9	39.9	39.9	39.0	39.0	39.0	39.0	39.9	39.9	40.9
165°	39.9	39.0	39.0	39.0	38.1	38.1	38.1	38.1	39.0	39.9	39.0
167.5°	38.1	38.1	38.1	38.1	38.1	37.2	37.2	38.1	38.1	38.1	39.0
170°	38.1	38.1	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	38.1
172.5°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	37.2	37.2	38.1	38.1
175°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	38.1	38.1	38.1	37.2
177.5°	38.1	38.1	38.1	38.1	37.2	38.1	38.1	38.1	38.1	38.1	38.1
180°	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1

(END OF REPORT)